TPM 21069
ER 07-19-005

Fire Protection Plan/Fuel Management Plan

For APN 519-094-16/TPM 21069

Sajady TPM/ER 07-19-005
3551 Babel Drive

Prepared By
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Prepared For the County of San Diego

January 12, 2009Revised February 17, 2010

Principal Author Lamont Landis

SAN DIEGO RURAL FIRE PROTECTION DISTRICT

August 25, 2010

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123-1666

Re: TPM 21069 Rev. 2/17/2010

Dear Planner,

The San Diego Rural Fire Protection District has reviewed the fire protection plan submitted by Lamont Landis Consulting Inc. The plan meets the objectives of the California Fire Code 2007 edition, Chapter 47 "Requirements for Wildland-Urban Interface (UWI) Areas" as well as the Fire Districts requirements for discretionary projects. Please call me directly with any questions that you may have.

Sincerely,

Cal Hendrie
Battalion Chief /
Fire Marshal

14024 Peaceful Valley Ranch Road • Jamul, California 91935 • (619) 669-1188 Fax (619) 669-1798

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EXECUTIVE SUMMARY

The proposed project is TPM 21069 to subdivide an 8.0 acre parcel into 3 parcels. The project is located at 3551 Babel Drive, Jamul (see Appendix E). The project encompasses gentle sloped land covered with Diego Coastal Sage Scrub. The surrounding property is urban developed with Diegan Coastal Sage Scrub and some non-native grasses. Removal of the vegetation for this project will be a marked improvement; it will substantially reduce the fire hazard in the area. The nearest fire protection for this project is San Diego Rural Fire Protection District Fire Station No. 36 and is less than 6.94 minutes away. Access to this project will be Babel Drive, which connects to Skyline Truck Trail. This Fire Protection Plan is in response to a request from the San Diego Rural Fire Protection District and the County of San Diego DPLU.

Chapter 1 Introduction

This Fire Protection Plan/Fuel Modification Plan (FPP) has been prepared for Muchtar Sajady for a lot split with 3 parcels. The purpose of the Fire Protection Plan is to assess the potential impacts resulting from wildland fire hazards and identify the measures necessary to adequately mitigate those impacts. As part of the assessment this plan has considered the property location, topography, geology, combustible vegetation (fuel types), climatic conditions and fire history. The plan addresses water supply, access (including secondary/emergency access where applicable), structural ignitability and fire resistive building features, fire protection systems and equipment, impacts to existing emergency services, defensible space and vegetation management. The plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect one or at risk communities and essential infrastructures. The plan recommends measures that property owners will take to reduce the probability of ignition of structures throughout the area addressed by the plan. This plan has been developed to protect the residential structures from potential radiant heat from wildfire hazards to the maximum extent practical. This plan does not guarantee that the structure will not burn, but greatly reduces that possibility. These are not shelter in place residences. A multitude of factors have been incorporated into the Fuel Modification Plan including wildfire history, prevailing wind patterns, existing vegetation /fuel loading, terrain and adjacent vegetation/land use.

Note: Title 14 requirements in State Responsibility Areas make fire requirements a multi-jurisdictional issue among the local fire authorities which include San Diego Rural Fire Protection District, CAL FIRE Unit Chief and the San Diego County DPLU (planning authority having jurisdiction implementing Title 14).

Project Location, Description and Environmental Setting

1.1.1Project Location

This project is located near the Community of Jamul and is in the San Diego Rural Fire Protection District response area. The project is located at 3551 Babel Drive, Jamul.

1.1.2Project Description

This project is within the San Diego Rural Fire Protection District emergency response area. The project consists of approximately 8 acres, the APN# is 519-094-16. The sizes of the structures are undetermined at this time. The type of occupancy will be single-family residences. The proposed potential use of the new parcels will be residential. There will be an onsite steep slope easement on Parcel 3. There will be off site improvement to the roads; Babel Drive will be improved from Lot 1 to Dropseed Terrace to 24 ft AC on 28 ft graded. Note: TM 5213 will be responsible for improvements from Dropseed Terrace to Skyline Truck Trail.

1.1.3Environmental Setting

The site was visited on August 22, 2008 by Lamont Landis

Topography
The project encompasses gentle sloped land with the elevations onsite ranging between approximately 1,450 to 1,575 feet above sea level.

Vegetation types are some non-native grass and mostly Diegan Coastal Sage Scrub.
Fuel loads: The property is covered with Diego Coastal Sage Scrub approximately three feet in height. The fuel load for this type of fuel will be approximately 3.6 tons per acre (RMRS-GTR-153 USDA Forest Service).

The Harris Fire burned in the area but not on the site. The Harris Fire started on October 21, 2007 at Harris Ranch Road and Highway 94 in Portrero; 90,440 acres were burned. The fire injured 21 civilians and 36 firefighters, five people died as result of the fire. Two hundred eleven homes and 262 outbuildings were destroyed, 259 structures were damaged. Embers from the wildfire traveled long distances due to Santa Ana winds and low humidity. The Harris Fire was driven by Santa Ana winds fueled by 50-year old brush and an extended drought.

The following scenarios are typical of the area and are to be considered worst case assumptions:
Summer

South, Southwest, Northwest and West wind condition can result in the following fuel moistures.

1-hour fuel moisture.....4%
10-hour fuel moisture.....6%
100-hour fuel moisture.....8%
Live woody fuel moisture.....80%

Fall
South, Southwest, Northwest and West wind condition can result in the following fuel moistures.

1-hour fuel moisture..... 2%
10-hour fuel moisture.....3%
100-hour fuel moisture.....5%
Live woody fuel moisture.....50%

Santa Ana Wind Condition two to four times a year.

1-hour fuel moisture 2%
10-hour fuel moisture.....3%
100- hour fuel moisture.....5%
Live woody fuel moisture.....50%

The ownership of the area is private. Onsite vegetation consists of non-native dry climate grasses and Diegan Coastal Sage Scrub, west of the property consist of private property and open space easements granted to the County of San Diego.

Chapter 2 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

The project is located next to some wildland areas with urban developed lands; however the new structure will be separated from the native vegetation by more than 100 feet of modified fuel selected from the San Diego County acceptable plant list. The project has paved roads through developed land to adequately egress the site. The access road to the proposed single family dwellings is less than 1,300 feet from a point of egress in two directions at the intersection of Dropseed Terrace and Babel Drive, and meets the San Diego County threshold of 1,320 feet for parcels 1 to 4.99 acres. The access on Babel Drive to Skyline Truck Trail is 1800 ft. and one of two means of egress.(See appidix G) The existing and new roads and driveways will support fire apparatus for access. The project will result in adequate emergency access. The project will not adversely affect the fire district. The water supply with existing and additional fire hydrants will serve the project and meet the requirements of the San Diego Rural Fire Protection District and the County of San Diego.

Chapter 3 ANTICIPATED FIRE BEHAVIORS IN THE VICINITY

The anticipated fire behavior onsite is not expected to be significant. Flames in the unmodified non-native grasses will be approximately 12.7 feet in height. The proper clearance of 30 feet next to the road sides should allow for egress in the event of a fire (non-native grasses with 12.7 foot max flame length). The flame length from the unmodified Diegan Coastal Sage Scrub will be approximately 52.9 feet. The offsite unmodified vegetation to the northeast will produce a large front of fire and covers miles of mountainous terrain with native vegetation. The removal of vegetation in the Fuel Modification Zone will provide adequate protection from radiant heat from a large fire. The ember production from a large front will be significant but will be mitigated by the enhanced construction in Chapter 7 A of the County Building Code. The off site urban developed (rural in nature) property should permit egress all the way to Skyline Truck Trail. The new structures will be 100 feet from this unmodified vegetation and mitigated by enhanced wildland urban interface construction as per Chapter 7A San Diego County Building Code. The project will meet the requirements of the California Fire Code, California Code of Regulations Title 14 (enforced by San Diego County DPLU), County Fire Code and the County Consolidated Fire Code.

Chapter 4 ANALYSIS OF PROJECT EFFECTS

The development of this area will reduce the spread of a wildfire by reducing the fuel loading, along with the existing and new water supply and fire hydrants; improving of roads in the project and clearing of the home site will provide additional fuel breaks in the area, this will be a major fuel break that will buffer and slow down a fire in the area. The Sajady Development will fall within the guidelines of the San Diego County General Plan for emergency response time objectives.

4.1 Adequate Emergency Services

Initial Fire Department response is from San Diego Rural Fire Department Station No. 36 which is located at 14047 Maxfield, this station is staffed by 3 firefighters (two full-time paid and one volunteer), 24 hours a day 7 days a week. Apparatus include one type-two engine, one type-three engine and one rescue truck. The station is located less than 3.21 miles from the above property and is less than 6.94 minutes away by using the estimated timetable in NFPA 1142.

4.2 Fire Access

The proposed fire access road is designed to allow for egress for the public and fire fighting access for the Fire Department. The on site road Babel Drive will be improved to 24 feet paved AC or better. The fuel modification on or adjacent to the road adds to the reduction of the spread of the fire and is part of the overall Fuel Modification Plan. All new roads and driveways shall have a minimum clearance of 30 feet on each side. Turnarounds shall comply with Appendix B. Angle of approach shall not exceed 7 Deg. The proposed access roads shall meet or exceed all San Diego County DPLU and San Diego Rural Fire Protection District requirements. All roads and driveways shall be all-weather surface suitable for travel by a 50,000 lb. fire apparatus. All driveways or roads that exceed 15% of grade will be Portland Cement Concrete with a deep broom finish perpendicular to the direction of travel to enhance traction; no grade will exceed 20% of grade. The primary access for this project is Babel Drive which will have a 36 ft. radius cul-de-sac at Parcel 1. Babel Drive is 20 ft wide to Skyline Truck Trail and meets Title 14 at 18 ft but not the San Diego County Fire Code at 24 ft. This project will be responsible for the widening of the road to 24 feet paved to Dropseed Terrace. TM 5213 rpl-1 is already responsible for widening the road Babel Drive to 24 feet paved from Dropseed Terrace to Skyline Truck Trail. Street signs shall be posted as per the County Standard (DS-13).

Egress from the project will comply with San Diego County standards. All roads are less than 1,320 feet from the point of egress in two directions, which meets the requirement for 1 to 4.99 acre parcels. Access from the project will be Babel Drive to Skyline Truck Trail which is 1,800 ft; however a second access at 1,300 ft is Babel Drive to Dropseed Terrace that continues on to Sleep Willow Lane to Hidden Trail Drive Skyline Truck Trail. (See map TM 5213 rpl-1 Appendix G)

4.3 Water
4.3.1 Public Water

The water supply for this proposed project will come from existing water mains. The water supply will come from the Otay Water District. The minimum required fire flow for this project will be 2500 GPM @ 20 PSI residual (see Appendix I). A proposed fire hydrant will be located at the southwest corner of Parcel #1 and will serve all three parcels. The new fire hydrant located at the southwest corner of Parcel #1 and the calculated fire flow is 900 Gallons per minute @ 0 psi. The fire flow calculation for the existing fire hydrant at the corner of Bonita Vista Way is 854@ 20 psi. The fire flow is below the required 2,500 gallons per minute which would normally require water tanks. Water tanks were previously recommended for the site, it was suggested that the fire hydrant would be acceptable. This plan is proposing the fire hydrant with 900 gallons per minute instead of the water tank with 10,000 gallons of water. (The water tank can supply 900 gallons of water per minute for 11 minutes, where the fire hydrant can supply 900 gallons per minute of water for 2 hours minimum.)

4.4 Ignition Resistant Construction and Fire Protection Systems

All new structures shall be equipped with the following interface features:

1. Roofs will be a Class "A" noncombustible material and shall meet the DPLU standards.
2. Eaves and balconies will be of noncombustible material and meet the San Diego County Building Code and comply with the International Urban-Wildland Interface Code 2006 Edition.
3. Exterior walls will be a noncombustible or ignition resistive material and meet the San Diego County Building Code Chapter 7A.
4. All habitable structures and attached garages will be equipped with automatic fire sprinklers per the County Consolidated Fire Code requirements (NFPA-13D). All sprinkler systems shall be approved by the San Diego Rural Fire Protection District prior to installation.
5. All future outbuildings must be approved by the San Diego Rural Fire Protection District prior to installation.
6. All structures will comply with the wildland area structural requirements of the County Building Code Chapter 7A in affect at the time of a building permit application.

4.5 Fire Fuel Assessment

The site has the potential to experience a vegetation fire; this is based on the type of vegetation and its continuous nature, Santa Ana winds, high temperatures, low humidity and drought conditions. Onsite vegetation consists of Diegan Coastal Sage Scrub (Model sh7 (147) fuel). The surrounding property is urban developed to the south with some non-native grassland and is maintained on an annual bases. East of the property is mostly Diegan Coastal Sage with a small amount of grasses. North of the property is urban developed (Rural Developed) with agriculture and Diegan Coastal Sage Scrub; west of the property is urban developed (Rural Developed) and Diegan Coastal Sage Scrub.

4.6 Fire Behavior Modeling

BehavePlus Wildfire Modeling

The BehavePlus Fire Modeling System (Version 4.0.0) developed by the U.S. Forest Service Rocky Mountain Research Station is the generally accepted software for modeling large-scale wildfire behavior and characteristics. The BehavePlus System was designed to evaluate a variety of wildfire variables for large wildland fires including surface fire spread, safety zones, fire containment, spotting distance crown scorch and probability of ignition. Two aspects of this program (surface fire spread and safety zone) have been utilized to assist in determining acceptable fuel modification requirements. The

BehavePlus Program coupled with onsite and surrounding area vegetation, access, slope and weather conditions are the basis for the following.

The BehavePlus Fire System has been run for the following worst case scenarios:

60 MPH wind, 100-degree ambient air temperature, 2 % dead fuel moisture, 50 % live fuel moisture and 50% max slope with 25 % average slope aspect. The model was run for four fuel model scenarios, as the project contains varying types of fuels.

It should be noted that the BehavePlus Model does not and cannot include all variables associated with a specific site and regime, and adjacent mixed land uses can influence the results.

The BehavePlus Model run results are summarized in Table 1.

Table 1

BehavePlus Fire Model

Fuel Model SCAL18 [Sage /Buckwheat]

Wind Speed & Direction	Mid-flame	Rate of Spread	Fire Line Intensity	Flame Length
60 mph N, NE, E	35.0 mph	387.4 Ch/h	30643 Btu/ft/s	52.1 ft.

Up-slope spotting distance= 3.4 miles

Fuel Model Sh2 Moderate Load, Dry Climate Shrub (S) (142)

Wind Speed & Direction	Mid-flame	Rate of Spread	Fire Line Intensity	Flame Length
60 mph N, NE, E	35 mph	205.9 Ch/h	5853 Btu/ft/s	24.3 ft

Up-slope spotting distance= 2.0 miles

The Behave Plus coupled with the expected offshore Santa Ana wind direction, anticipated down slope fire line aspect and relatively low fuel vegetation within the urban wildland interface areas, and existing fuel modified areas serves as a basis for formulation of the recommended Fuel Modification Zone locations.

4.7 Defensible Space and Vegetation Management

Fuel Management Zones:

Parcel 1, 2 and 3

As proposed the residential structure from the structure to a point 50 feet in all directions shall be maintained as Zone 1 and from a point 50 feet from the structure to 100 feet shall be maintained as Zone 2. Zones 1 and 2 shall be clearly and permanently marked for annual maintenance. Exception: The north side of the structure on Parcel #2 is 50 feet from the property line and will be cleared off site as per SDRFPD Ordinance 2005-01 for the Zone 2 clearance. All distances are on a horizontal plane regardless of the slope.

Note: The San Diego Rural Fire Protection District requires that vacant land be cleared to 100 feet from adjacent structures, Ordinance # 2005-01

Note: All Fuel Modification Zones must be delineated with permanent markers until such times as they are no longer needed as determined by the Fire Marshal. The most reliable markers are metal fence posts with a baked on painted finish (Day Glow Orange on the top half).

Fuel Management Zone 1:

Zone 1 is the first 50 feet or as otherwise indicated; this is an area where native vegetation has been removed, irrigated and planted with drought-tolerant and fire resistant plant material. Plant selection shall be from Appendix A, (The San Diego County Acceptable Plant List).

The purpose of Zone 1 (set back zone) is to provide a defensible space for fire suppression forces to protect structures from radiant and convective heat. The following shall be part of fuel management of this zone:

1. No combustible construction, groves, firewood, propane tanks, fuel or combustible native or ornamental vegetation shall be allowed within the 50 foot set back Zone 1 or within 30 feet of the edge of slopes.
2. Mature trees (>18') to be limbed up or canopied 6' to 8' from ground level.
3. No tree limbs within 10' of chimney outlets or dead limbs overhanging structures.
4. Spacing between mature tree canopies must be as follows:
    A. Slopes 0-20 % ----10 Feet.
    B. Slopes 21-40 % ----20 Feet.
    C. Slopes > 41 % ----30 Feet.

The minimum horizontal space between the edges of shrubs

A. Slopes 0-20%----2 times the height of the shrub.
B. Slopes 21-40%----4 times the height of the shrub.
C. Slopes > 40%----6 times the height of the shrub.

The minimum vertical space between the top of the shrub and the bottom of the lower tree braches is 3 times the height of the shrub.

(Gilmer, M. 1994 California Wildfire Landscaping, adapted by the State Board of Forestry and Fire Protection on February 8, 2006.)

Fuel Management Zone 2

This Fuel Management Zone will be the area between 50 feet to 100 feet of the structure. The landscape plans shall include methods of erosion control to protect against slope failure. The following shall apply to Zone 2:

1. Clear 50% of the existing native combustible vegetation including all dead and dying. This area must be modified so combustible vegetation does not occupy more than 50% of the total square footage. Trees may remain provided that the horizontal distance between crowns of the adjacent trees is not less than 10 feet. All remaining native vegetation shall be maintained at a height of 18 inches on year round bases. Native grasses shall be maintained at a height of 4 to 6 inches on year round bases.
2. Orchards, groves and vineyards shall be maintained as per sec. 4707.3.2 of the San Diego County Fire Code adopted January 30, 2008.
3. Fire resistive plant materials are also required in Zone 2 to control soil erosion and/or to reduce vegetation mass near the wildland interface.
4. Plant spacing will be the same as noted for Zone 1.
5. All plants used in Zone 1 and 2 comply with the San Diego County Acceptable Plant List, Appendix A.

Landscape Requirements/Restrictions

The landscaping within the Fuel Modification Zones must be approved by the San Diego Rural Fire Protection District and shall include low fuel, drought tolerant type vegetation from the list adopted by the County of San Diego (see Appendix A).

Fuel Modification Zone Maintenance Requirements

Fuel Modification Zones must be maintained in a manner that will fulfill the intent of the Fuel Modification Plan and meet the requirements of the San Diego Rural Fire Protection District. Maintenance will include initial planting, weeding, irrigation installation, maintenance and plant pruning; removal of dead and down vegetation, and the replacement of plants as required.

The following will also apply to this project:

1. Each lot owner is personally responsible for all irrigation and landscaping Fuel Treatment Zones within their property boundaries.

2. The San Diego Rural Fire Protection District will hold each lot owner accountable for enforcement of all wildland fire protection issues discussed in this plan.
3. Each lot owner shall not allow trash dumping or disposal of any yard trimmings in the Fuel Treatment Zones.
4. The San Diego Rural Fire Protection District or its designated representative shall decide any disputes related to individual lot landscaping or fuel treatment, with respect to interpretation of the Fire Protection Plan. Decisions shall be final and binding on the lot owner.
5. Should modifications to the Tentative Map Plans occur, any and/or all of the Fire Protection Plan may be revised at the discretion of the San Diego Rural Fire Protection District.
6. All exterior boundaries of Zones 1 and 2 shall be permanently marked on the ground for purposes of guiding annual fuel management maintenance and inspection operations. The most reliable markers are steel fence post with a baked on painted finish. The upper half of the above ground portion of the fence post is then painted a bright "day glow" orange to improve visibility. These Fuel Treatment Zone markers must be spaced so that the markers on each side of an installed marker can be seen from that marker.

4.8 Cumulative Impact Analysis

This and other projects may have a cumulative impact on the ability to protect residences from wildfires. Over time with this project and other development in the area the population in rural areas will increase, which may increase the chances of a wildfire and increase the number of people and structures exposed to the risk of loss, injury or death.

Property taxes and other currently applicable fees generated by the project may not adequately fund fire services. This project is required to participate in CDF 04-1 prior to the recordation of the parcel map or issuance of any permits.

Chapter 5 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

The fuel modification will reduce the threat to the structures from the vegetation onsite. The structure will be designed with enhanced fire resistive construction as per the County Building Code Chapter 7A. The driveway and access roads will have 30 feet of clearing (fuel modification) on both sides. The structure will have 100 feet of fuel modification. The fire hydrant and the on site road improvements will allow for fire fighting access.

Chapter 6 CONCLUSIONS

The development of this area will reduce the spread of a wildfire by reducing the fuel loading, and the addition of water supply (additional hydrants for fire fighting @ 2500 gallons per minute at 20 psi residual); improving of roads in the project and the clearing

of home sites will provide additional fuel breaks in the area. A two tiered Fuel Modification Zone system is proposed to create an adequate fire safety buffer along the proposed development areas and access roads, which would be defensible space in case of a wildfire. The Fuel Modification Zone recommendations are based upon a combination of BehavePlus modeling data, onsite vegetation, access, surrounding area fuel conditions, slope and worst-case weather conditions. The Fuel Modification Zones have been designed to meet the requirements of the San Diego Rural Fire Protection District and San Diego County DPLU. The proposed mitigation will reduce the significance to a "less than significant" status in accordance with guidelines.

Chapter 7 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

Ron Ashman - Crew Engineering
David Nissen – Battalion Chief San Diego Rural Fire Protection District.
Lamont Landis - Principal Author (is on the San Diego County list of approved consultants).

Chapter 8 REFERANCES

1. Behave: Fire Behavior Prediction and Fuel Modeling – Burn Subsystems. Part 1 General Technical Report INT-194. January 1986. Patricia L. Andrews USDA Forest Service, Intermountain Station, Ogden Utah, 84401.
2. Behave: Fire Behavior Prediction and Fuel Modeling- Burn Subsystem Part 2. General Technical Report INT-360. May 1989 Patricia L. Andrews and Carolyn H. Chase. USDA Forest Service. Intermountain Station, Ogden, Utah 84401.
3. BehavePlus Fire Modeling System, Version 3.02 Patricia L. Andrews, Collins D. Bevins and Robert C. Seli. US Forest Services, Rocky Mountain Research Station, Fire Sciences Laboratory. Missoula MT.
4. How to Predict the Spread and Intensity of Forest and Range Fires. General Technical Report INT-1943 May 1989. Richard C. Rothermel, USDA Forest Service Intermountain Station, Ogdan Utah, 84401.
5. 2007 California Fire Code, California Code of Regulations Title 24 Part 9. Which is based on the 2006 International Fire Code,
6. County of San Diego Fire Code and Building Code and Amendments Effective January 30, 2008. Section 96.1.001
7. National Fire Protection Association NFPA 1142 Water Supplies for Suburban and Rural Firefighting 2001 Edition.
8. International Code Council Urban-Wildland Interface Code 2006 edition
9. Standard Fire Behavior Fuel Models: A Comprehensive Set For Use with Rothermel's Surface Fire Spread Model. Authors Joe H. Scott and Robert E. Burgan General Technical Report RMRS-GTR-153 USDA Forest Service Rocky Mountain Research Station.

10. Aids for Determining Fuel Models for Estimating Fire Behavior. By Hal E Anderson USDA Forest Service General Technical Report INT-122
11. General Guidelines for Creating Defensible Space Adopted by The State Board of Forestry and Fire Protection on February 8, 2008
12. USDA Forest service General Technical Report PSW-GTR-158. 1995 (Jack Cohen)

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Appendix A

Undesirable Plan List

Acceptable Plants for a Defensible Space In Fire Prone Areas

SUGGESTED PLANT LIST FOR A DEFENSIBLE SPACE

BOTANICAL NAME	COMMON NAME	Climate Zone
TREES		
Acer		
platanoides	Norway Maple	M
rubrum	Red Maple	M
saccharinum	Silver Maple	M
saccarum	Sugar Maple	M
macrophyllum	Big Leaf Maple	C/ (R)
Alnus rhombifolia	White Alder	C/I/M (R)
Arbutus		
unedo	Strawberry Tree	All zones
Archontophoenix		
cunninghamiana	King Palm	C
Arctostaphylos spp.**	Manzanita	C/I/D
Brahea		
armata	Blue Hesper Palm	C/D
edulis	Guadalupe Palm	C/D
Ceratonia siliqua	Carob	C/I/D
Cerdidium floridum	Blue Palo Verde	D
Cercis occidentalis**	Western Redbud	C/I/M
Cornus		
nuttallii	Mountain Dogwood	I/M
stolonifera	Redtwig Dogwood	I/M
Eriobotrya		C/I/D
japonica	Loquat	C
Erythrina caffra	Kaffirboom Coral Tree	I/M
Gingko biloba "Fairmount"	Fairmount Maidenhair Tree	I/D/M
Gleditisia triacanthos	Honey Locust	
Juglans		I
californica	California Walnut	C/I
hindsii	California Black Walnut	I/D/M
Lagerstroemia indica	Crape Myrtle	I
Ligustrum lucidum	Glossy Privet	C/I/M
Liquidambar styraciflua	Sweet Gum	I
Liriodendron tulipifera	Tulip Tree	
Lyonothamnus floribundus		C
ssp. Asplenifolius	Fernleaf Catalina Ironwood	C/I/D
Melaleuca spp.	Melaleuca	C/I
Parkinsonia aculeate	Mexican Palo Verde	
Pistacia	Chinese Pistache	
chinensis	Pistachio Nut	C/I/D

vera	Pistachio Nut	I
Pittosporum		
phillyraeoides	Willow Pittosporum	C/I/D
viridiflorum	Cape Pittosporum	C/I
Platanus		
acerifolia	London Plane Tree	All zones
racemosa**	California Sycamore	C/I/M
Populus		
alba	White Poplar	D/M
fremontii**	Western Cottonwood	I
trichocarpa	Black Cottonwood	I/M
Prunus		
xblireiana	Flowering Plum	M
caroliniana	Carolina Laurel Cherry	C
ilicifolia**	Hollyleaf Cherry	C
lyonii**	Catalina Cherry	C
serrulata 'Kwanzan'	Flowering Cherry	M
yedoensis 'Akebono'	Akebono Flowering Cherry	M
Quercus		
agrifolia**	Coast Live Oak	C/I
engelmannii	Engelmann Oak	I
** suber	Cork Oak	C/I/D
Rhus		
lancea**	African Sumac	C/I/D
Salix spp.**	Willow	All zones (R)
Tristania conferta	Brisbane Box	C/I
Ulmus		
parvifolia	Chinese Elm	I/D
pumila	Siberian Elm	C/M
Umbellularia californica**	California Bay Laurel	C/I

SHRUBS

Agave	Century Plant	D
americana	Century Plant	D
deserti	Shawis Century Plant	D
shawi**		
Amorpha fruticosa**	False Indigobush	I
Arbutus		
menziesii**	Madrone	C/I
Arctostaphylos spp.**	Manzanita	C/I/D
Atriplex**		
canescens	Hoary Saltbush	I
lentiformis	Quail Saltbush	D
Baccharis**		
glutinosa	Mule Fat	C/I
pilularis	Coyote Bush	C/I/D
Carissa grandiflora	Natal Plum	C/I
Ceanothus spp.**	California Lilac	C/I/M
Cistus spp.	Rockrose	C/I/D
Cneoridium dumosum**	Bushrue	C
Comarostaphylis**		
diversifolia	Summer Holly	C
Convolvulus cneorum	Bush Morning Glory	C/I/M
Dalea		
orcuttii	Orcutt's Delea	D
spinosa**	Smoke Tree	I/D
Elaeagnus		
pungens	Silverberry	C/I/M
Encelia**		
californica	Coast Sunflower	C/I
farinose	White Brittlebush	D/I
Eriobotrya		
deflexa	Bronze Loquat	C/I
Eriophyllum		
confertiflorum**	Golden Yarrow	C/I
staechadifolium	Lizard Tail	C
Escallonia spp.	Escallonia	C/I
Feijoa sellowiana	Pineapple Guava	C/I/D
Fouqueria splendens	Ocotillo	D
Fremontodendron**		
californicum	Flannelbush	I/M
mexicanum	Southern Flannelbush	I
Galvezia		
juncea	Baja Bush-Snapdragon	C
speciosa	Island Bush-Snapdragon	C
Garrya		
elliptica	Coast Silktassel	C/I
flavescens**	Ashy Silktassel	I/M

Heteromeles arbutifolia**	Ashy Silktassel	I/M
Lantana spp.	Toyon	C/I/M
Lotus scoparius	Lantana	C/I/D
Mahonia spp.	Deerweed	C/I
	Barberry	C/I/M
Malacothamnus		
clementinus		
	San Clemente Island Bush Mallow	C
fasciculatus**		
	Mesa Bushmallow	C/I
Melaleuca spp.		
Mimulus spp.**	Melaleuca	C/I/D
Nolina	Monkeyflower	C/I (R)
parryi		
parryi ssp. wolfii	Parry's Nolina	I
Photinia spp.	Wolf's Bear Grass	D
Pittosporum	Photinia	All Zones
crassifolium		
rhombifolium		CI/I
tobira 'Wheeleri'	Queensland Pittosporum	C/I
undulatum	Wheeler's Dwarf	C/I/D
viridiflorum	Victorian Box	C/I
Plumbago auriculata	Cape Pittosporum	C/I
Prunus	Cape Plumbago	C/I/D
caroliniana		
ilicifolia**	Carolina Laurel Cherry	C
lyonii**	Hollyleaf Cherry	C
Puncia granatum	Catalina Cherry	C
Pyracantha spp.	Pomegranate	C/I/D
Quercus	Firethorn	All Zones
dumosa**		
Rhamus	Scrub Oak	C/I
alaternus		
californica**	Italian Blackthorn	C/I
Rhaphiolepis spp.	Coffeeberry	C/I/M
Rhus	Rhaphiolepis	C/I/D
integrifolia**		
laurina	Lemonade Berry	C/I
lentii	Laurel Sumac	C/I
ovata**	Pink-Flowering Sumac	C/D
trilobata**	Sugarbush	I/M
Ribes	squawbush	I
viburnifolium		
speciosum**	Evergreen Currant	C/I
Romneya coulteri	Fuschia-Flowering Gooseberry	C/I/D
Rosa	Matilija Poppy	I
californica**		
minutifolia		

Salvia spp.**	California Wild Rose	C/I
Sambucus spp.**	Baja California Wild Rose	C/I
Symphoricarpos mollis**	Sage	All Zones
Syringa vulgaris	Elderberry	C/I/M
Tecomaria capensis	Creeping Snowberry	C/I
Teucrium fruticans	Lilac	M
Toxicodendron**	Cape Honeysuckle	C/I/D
diversilobum	Bush Germander	C/I
Verbena		
lilacina	Poison Oak	I/M
Xylosma congestum		
Yucca**	Lilac Verbena	C
schidigera	Shiny Xylosma	C/I
whipplei		
	Mojave Yucca	D
	Foothill Yucca	I

GROUNDCOVERS

Achillea**	Yarrow	All Zones
Aptenia cordifolia	Apteria	C
Arctostaphylos spp.**	Manzanita	C/I/D
Baccharis**		
pilularis	Coyote Bush	C/I/D
Ceanothus spp.**	California Lilac	C/I/M
Cerastium tomentosum	Snow-in-Summer	All Zones
Coprosma kirkii	Creeping Coprosma	C/I/D
Cotoneaster spp.	Redberry	All Zones
Drosanthemum hispidum	Rosea Ice Plant	C/I
Dudleya		
brittonii	Brittonis Chalk Dudleya	C
pulverulenta**	Chalk Dudleya	C/I
virens	Island Live Fore-ever	C
Eschscholzia californica**	California Poppy	All Zones
Euonymus fortunei		
'Carrierei'	Glossy Winter Creeper	M
'Coloratus'	Purple-Leaf Winter Creeper	M
Ferocactus viridescens**	Coast Barrel Cactus	C
Gaillardia grandiflora	Blanket Flower	All Zones
Gazania spp.	Gazania	C/I
Helianthemum spp.**	Sunrose	All Zones
Lantana spp.	Lantana	C/I/D
Lasthenia		
californica**	Common Goldfields	I
glabrata	Coastal Goldfields	C
Lupinus spp.**	Lupine	C/I/M
Myoporum spp.	Myoporum	C/I
Pyracantha spp.	Firethorn	All zones
Rosmarinus officinalis	Rosemary	C/I/D
Santolina		
chamaecyparissus	Lavender Cotton	All Zones
virens	Santolina	All Zones
Trifolium frageriferum	O'Connor's Legume	C/I
Verbena		
rigida	Verbena	All Zones
Viguiera laciniata**	San Diego Sunflower	C/I
Vinca		
minor	Dwarf Periwinkle	M

VINES

Antigonon leptopus	San Miguel Coral Vine	C/I
Distictis buccinatoria	Blood-Red Trumpet Vine	C/I/D
Keckiella cordifolia**	Heart-Leaved Penstemon	C/I
Lonicera		
japonica 'Halliana'	Hall's Honeysuckle	All Zones
subspicata**	Chaparral Honeysuckle	C/I
Solanum		
jasminoides	Potato Vine	C/I/D

PERENNIALS

Coreopsis		
gigantean	Giant Coreopsis	C
grandiflora	Coreopsis	All Zones
maritime	Sea Dahlia	C
verticillata	Coreopsis	C/I
Heuchera maxima	Island Coral Bells	C/I
Iris douglasiana**	Douglas Iris	C/M
Iva hayesiana**	Poverty Weed	C/I
Kniphofia uvaria	Red-Hot Poker	C/M
Lavandula spp.	Lavender	All Zones
Limonium californicum		
var. mexicanum	Coastal Statice	C
perezii	Sea Lavender	C/I
Oenothera spp.	Primrose	C/I/M
Penstemon spp.**	Penstemon	C/I/D
Satureja douglasii	Yerba Buena	C/I
Sisyrinchium		
bellum	Blue-Eyed Grass	C/I
californicum	Golden-Eyed Grass	C
Solanum		
xantii	Purple Nightshade	C/I
Zauschneria**		
californica	California Fuschia	C/I
cana	Hoary California Fuschia	C/I
'Catalina'	Catalina Fuschia	C/I

ANNUALS

Lupinus spp.**	Lupine	C/I/M

UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 50 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio. Many of these species, if existing on the property and adequately maintained (pruning, thinning, irrigation, litter removal, and weeding), may remain as long as the potential for spreading a fire has been reduced or eliminated.

BOTANICAL NAME	COMMON NAME
Abies species	Fir Trees
Acacia species	Acacia (trees, shrubs, groundcovers)
*Adenostoma sparsifolium***	Red Shanks
*Adenostoma fasciculatum***	Chamise
Agonis juniperina	Juniper Myrtle
Araucaria species	Monkey Puzzle, Norfolk Island Pine
*Artemesia californica***	California Sagebrush
Bambusa species	Bamboo
Cedrus species	Cedar
Chamaecyparis species	False Cypress
Coprosma pumila	Prostrate Coprosma
Cryptomeria japonica	Japanese Cryptomeria
Cupressocyparis leylandii	Leylandii Cypress
*Cupressus forbesii***	Tecate Cypress
Cupressus glabra	Arizona Cypress
Cupressus sempervirens	Italian Cypress
Dodonea viscosa	Hopseed Bush
*Eriogonum fasciculatum***	Common Buckwheat
Eucalyptus species	Eucalyptus
*Heterotheca grandiflora***	Telegraph Plant
Juniperus species	Junipers
Larix species	Larch
Lonicera japonica	Japanese Honeysuckle
Miscanthus species	Eulalia Grass
*Muehlenbergia species***	Deer Grass
Palmae species	Palms
Picea species	Spruce Trees
*Pickeringia Montana***	Chaparral Pea
Pinus species	Pines
Podocarpus species	Fern Pine
Pseudotsuga menziesii	Douglas Fir
Rosmarinus species	Rosemary
*Salvia mellifera***	Black Sage
Taxodium species	Cypress
Taxus species	Yew
Thuja species	Arborvitae
Tsuga species	Hemlock
*Urtica urens***	Burning Nettle

** San Diego County native species

References: Gordon, H. White, T.C. 1994. Ecological Guide to Southern California Chaparral Plant Series. Cleveland National Forest.

Willis, E. 1997. San Diego County Fire Chief's Association. Wildland/Urban Interface Development Standards

City of Oceanside, California. 1995. Vegetation Management. Landscape Development Manual. Community Services Department, Engineering Division.

City of Vista, California 1997. Undesirable Plants. Section 18.56.999. Landscaping Design, Development and Maintenance Standards.

www.bewaterwise.com. 2004. Fire-resistant California Friendly Plants.

www.ucfpl.ucop.edu. 2004. University of California, Berkeley, Forest Products Laboratory, College of Natural Resources. Defensible Space Landscaping in the Urban/Wildland Interface. A Compilation of Fire Performance Ratings of Residential Landscape Plants.

County of Los Angeles Fire Department. 1998. Fuel Modification Plan Guidelines. Appendix I, Undesirable Plant List, and Appendix II, Undesirable Plant List.

INVASIVE PLANT LIST

The following species are considered invasive (i.e., those capable of reproducing and spreading into native, non-irrigated areas and displacing those communities). Non-native plant species are prohibited in all areas adjacent to open space lands. Noxious weeds that have been introduced to San Diego County over the years tend to be more widespread and therefore more difficult to contain. The plants listed below have been identified as invasive and/or as noxious weeds and should not be planted or allowed to sprout in any transitional landscapes (landscapes planted with non-native species next to undeveloped areas).

BOTANICAL NAME	COMMON NAME
Ailanthus altissima	Tree of Heaven
*Anthemis cotula****	Mayweed, Stinking Chamolile
Arctotheca calendola	Cape Weed
Arundo donax	Giant Cane
Atriplex semibaccata	Australian Saltbush
*Brassica species****	Mustard
*Cardaria draba****	Hoary Cress, Perennial Peppergrass
Carpobrotus edulis	Ice Plant
Centaurea solstitialis	Yellow Starthistle
*Cirsium vulgare****	Wild Artichoke
Conium maculatum	Poison Hemlock
*Conyza Canadensis****	Horseweed
Cortaderia selloana	Pampas Grass
Cotoneaster lacteus	Cotoneaster
Cupressus macrocarpa	Monterey Cypress
*Cynara cardunculus****	Artichoke Thistle
Cytisus species	Scotch Broom, French Broom, etc
Elaeagnus angustifolia	Russian Olive
Eucalyptus globulus	Eucalyptus Blue Gum
*Gensita species****	Broom
Hedera helix	English Ivy
Hypericum perforatum	St. John's Wort
Ilex aquifolium	English Holly
*Lactuca serriola****	Prickly Lettuce
Lepidium latifolium	Perennial Pepperweed
Myoporum parvifolium	Trailing Myoporum
Nerium oleander	Oleander
Nicotiana species	Tree Tobacco
Olea europaea	Olive
Pennisetum setaceum	Fountain Grass
Ricinus communis	Castor Bean
Robinia pseudoacacia	Black Locust
*Salsola australis****	Russian Thistle, Tumbleweed
Schinus molle	California Pepper
Schinus terebinthifolius	Brazilian Pepper
*Silybum marianum****	Milk Thistle
Spartium junceum	Spanish Broom

Tamarix species	Tamarisk
*Ulex europea****	Gorse
Vinca major	Periwinkle

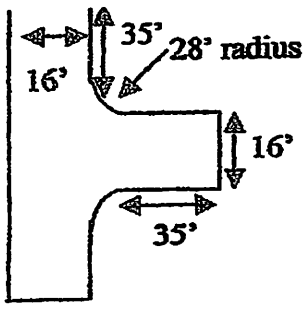
*** Introduced Weeds to San Diego County

References: Bell, Carl, Regional Advisor – Invasive Plants. 2004. University of California Cooperative Extension.

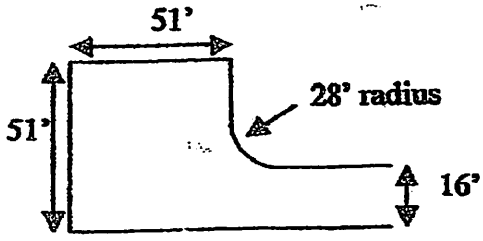
California Exotic Pest Plant Council. October, 1999. Exotic Pest Plants of Greatest Ecological Concern in California. Most Invasive Wildland Pest Plants. www.caleppc.org/info/99lista.html.

Appendix B

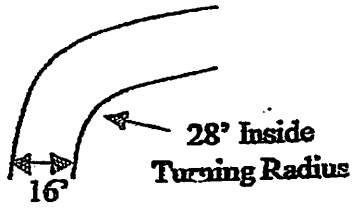
Fire Apparatus Turnaround Configurations



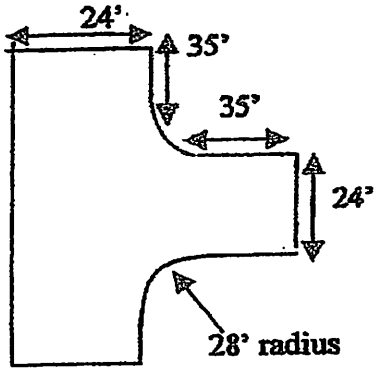
Private Driveway
Hammerhead



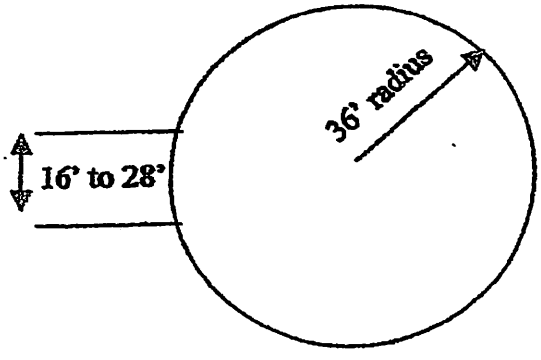
Alternate Private
Driveway Hammerhead

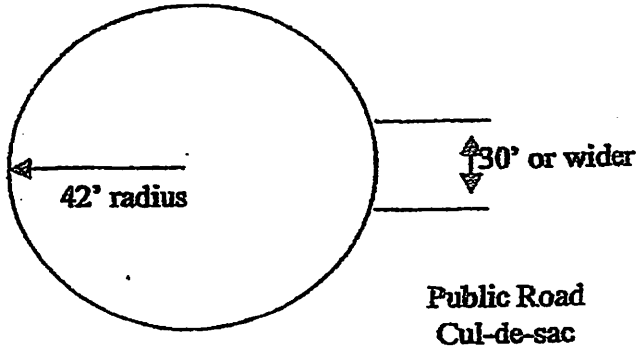


Private Road or
Driveway Cul-de-sac

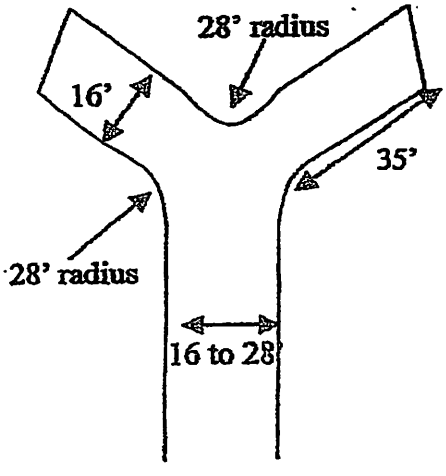


Private Road
Hammerhead

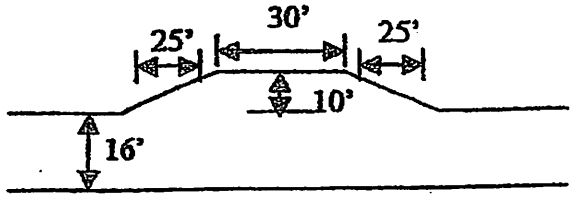




Public Road
Cul-de-sac



Hammerhead Incorporating Radius



Turnout—Required for driveways
In excess of 300-400'

NOT TO SCALE

(OVER)

80'
16'
35'
28' RADIUS
16'
55'
57'
16'
55'
16'
28' RADIUS
80'
16'
35'
28' RADIUS
70
16'
35'
28' RADIUS
16'
55'
16'
30
40

Appendix C

Photos

The north property line

West of the property
currently under
developement

Northeast of the property
open space easement

Looking east of the property

Looking to the south on the property

Parcel to the north of the property

The access road to the property

Parcel to the north of the property


Babel Dr
3551 Babel Dr, Jamul, CA 91935
Untitled Placemark
© 2008 Tele Atlas
Image U.S. Geological Survey
Google
Bonita Vista Way
32°44'19.42" N 116°50'58.68" W
elev 451 m
2003
Eye alt 719 m

Appendix D

Behaveplus 4.0.0 Fire Model

Inputs: SURFACE, SPOT, IGNITE

Description		Sajady
Fuel/Vegetation, Surface/Understory		
Fuel Model		1
Fuel/Vegetation, Overstory		
Canopy Height	ft	3
Fuel Moisture		
1-h Moisture	%	2
10-h Moisture	%	
100-h Moisture	%	
Live Herbaceous Moisture	%	
Live Woody Moisture	%	
Weather		
20-ft Wind Speed (upslope)	mi/h	69
Wind Adjustment Factor		0.40
Air Temperature	oF	100
Fuel Shading from the Sun	%	0
Terrain		
Slope Steepness	%	25
Ridge-to-Valley Elevation Difference	ft	500
Ridge-to-Valley Horizontal Distance	mi	.1
Spotting Source Location		ML

Run Option Notes

Maximum reliable effective wind speed limit is imposed [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always for the direction of the spread calculations [SURFACE].

Wind is blowing upslope [SURFACE].

Output Variables

Surface Rate of Spread (maximum) (ch/h) [SURFACE]

Heat per Unit Area (Btu/ft2) [SURFACE]

Fireline Intensity (Btu/ft/s) [SURFACE]

Flame Length (ft) [SURFACE]

(continued on next page)

Input Worksheet (continued)

Midflame Wind Speed (upslope) (mi/h) [SURFACE]

Wind Adjustment Factor [SURFACE]

Spot Dist from a Wind Driven Surface Fire (mi) [SPOT]

Probability of Ignition from a Firebrand (%) [IGNITE]

Notes

Sajady

Surface Rate of Spread (maximum)	665.6	ch/h
Heat per Unit Area	116	Btu/ft2
Fireline Intensity	1415	Btu/ft/s
Flame Length	12.7	ft
Midflame Wind Speed (upslope)	27.6	mi/h
Wind Adjustment Factor	0.40	
Spot Dist from a Wind Driven Surface Fire	1.2	mi
Probability of Ignition from a Firebrand	100	%

Discrete Variable Codes Used

Sajady

Fuel Model

1	Short grass (S)

Spotting Source Location

ML	Midslope, Leeward

Inputs: SURFACE, SPOT, IGNITE

Description		Sajady

Fuel/Vegetation, Surface/Understory

Fuel Model		sh5

Fuel/Vegetation, Overstory

Canopy Height	ft	3

Fuel Moisture

1-h Moisture	%	2
10-h Moisture	%	3
100-h Moisture	%	
Live Herbaceous Moisture	%	
Live Woody Moisture	%	50

Weather

20-ft Wind Speed (upslope)	mi/h	69
Wind Adjustment Factor		0.40
Air Temperature	oF	100
Fuel Shading from the Sun	%	0

Terrain

Slope Steepness	%	25
Ridge-to-Valley Elevation Difference	ft	500
Ridge-to-Valley Horizontal Distance	mi	.1
Spotting Source Location		ML

Run Option Notes

Maximum reliable effective wind speed limit is imposed [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always for the direction of the spread calculations [SURFACE].

Wind is blowing upslope [SURFACE].

Output Variables

Surface Rate of Spread (maximum) (ch/h) [SURFACE]

Heat per Unit Area (Btu/ft2) [SURFACE]

Fireline Intensity (Btu/ft/s) [SURFACE]

Flame Length (ft) [SURFACE]

(continued on next page)

Input Worksheet (continued)

Midflame Wind Speed (upslope) (mi/h) [SURFACE]

Wind Adjustment Factor [SURFACE]

Spot Dist from a Wind Driven Surface Fire (mi) [SPOT]

Probability of Ignition from a Firebrand (%) [IGNITE]

Notes

Sajady

Surface Rate of Spread (maximum)	834.6	ch/h
Heat per Unit Area	2068	Btu/ft2
Fireline Intensity	31636	Btu/ft/s
Flame Length	52.9	ft
Midflame Wind Speed (upslope)	27.6	mi/h
Wind Adjustment Factor	0.40	
Spot Dist from a Wind Driven Surface Fire	3.4	mi
Probability of Ignition from a Firebrand	100	%

Discrete Variable Codes Used
Sajady

Fuel Model

sh5 High load, dry climate shrub (S) (145)

Spotting Source Location

ML Midslope, Leeward

Appendix E

Street Name Change Letter

JN 1342
2/11/09
Sandy
TPM

ERIC GIBSON
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
www.sdcounty.ca.gov/dplu

August 11, 2009

To: Rusty Otten

From: Nora Rivera
Land Use Technician III

Subject: Jamul Vistas Drive

Per our conversation, "Jamul Vistas Drive" does no longer exist. It was changed to "Babel Drive", on May 15, 2009.

If you have more questions please call at 858-694-3797.

Appendix F

Project Facility Availability Fire

COUNTY OF SAN DIEGO
DEPT. OF PLANNING & LAND USE
5201 RUFFIN ROAD, SUITE B
SAN DIEGO, CA 92123-1666
(858) 565-5981 • (800) 267-8770

PROJECT FACILITY AVAILABILITY FORM

FIRE

Please type or use pen

MUCHTAR SAJADY (612) 716-3617
Owner's Name Phone

10482 MISSISSIPPI BLVD.
Owner's Mailing Address Street

COON RAPIDS MN 55433
City State Zip

ORG _____
ACCT _____
ACT _____
TASK _____
DATE _____ AMT $ _____

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION — TO BE COMPLETED BY APPLICANT

A. ☐ Major Subdivision (TM) ☐ Specific Plan or Specific Plan Amendment
☒ Minor Subdivision (TPM) ☐ Certificate of Compliance: _____
☐ Boundary Adjustment
☐ Rezone (Reclassification) from _____ to _____ zone.
☐ Major Use Permit (MUP), purpose: _____
☐ Time Extension ... Case No. _____
☐ Expired Map ... Case No. _____
☐ Other _____

B. ☒ Residential ..... Total number of dwelling units 3
☐ Commercial ..... Gross floor area _____
☐ Industrial ..... Gross floor area _____
☐ Other ..... Gross floor area _____

C. Total Project acreage 8.0 Total lots 3 Smallest proposed lot 2.12ac.

Assessor's Parcel Number(s)
(Add extra if necessary)

519	094	16

Thomas Bros. Page 1273 Grid A-6

Project address 3551 JAMUL VISTAS DR.
Street

JAMUL 91935
Community Planning Area/Subregion Zip

OWNER/APPLICANT AGREES TO COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: _____ AS AGENT FOR OWNER Date: 3/13/07

Address: 5725 KEARNY VILLA RD, STE D, SD, CA 92123 Phone: (858) 571-0555

(On completion of above, present to the district that provides fire protection to complete Sections 2 and 3 below.)

SECTION 2. FACILITY AVAILABILITY — TO BE COMPLETED BY DISTRICT

District name: San Diego Rural Fire Protection Dist

Indicate the location and distance of the primary fire station that will serve the proposed project: Station 66 +- 4 miles

A. ☒ Project is in the District and eligible for service.
☐ Project is not in the District but is within its Sphere of Influence boundary, owner must apply for annexation.
☐ Project is not in the District and not within its Sphere of Influence boundary.
☐ Project is not located entirely within the District and a potential boundary issue exists with the _____ Distric

B. ☒ Based on the capacity and capability of the District's existing and planned facilities, fire protection facilities are currently adequate or will be adequate to serve the proposed project. The expected emergency travel time to the proposed project is 5 minutes.
☐ Fire protection facilities are not expected to be adequate to serve the proposed development within the next five years.

C. ☐ District conditions are attached. Number of sheets attached: _____
☒ District will submit conditions at a later date.

SECTION 3. FUELBREAK REQUIREMENTS

Note: The fuelbreak requirements prescribed by the fire district for the proposed project do not authorize any clearing prior to project approval by the Department of Planning and Land Use.

☒ Within the proposed project 100 feet of clearing will be required around all structures.
☒ The proposed project is located in a hazardous wildland fire area, and additional fuelbreak requirements may apply. Environmental mitigation requirements should be coordinated with the fire district to ensure that these requirements will not pose fire hazards.

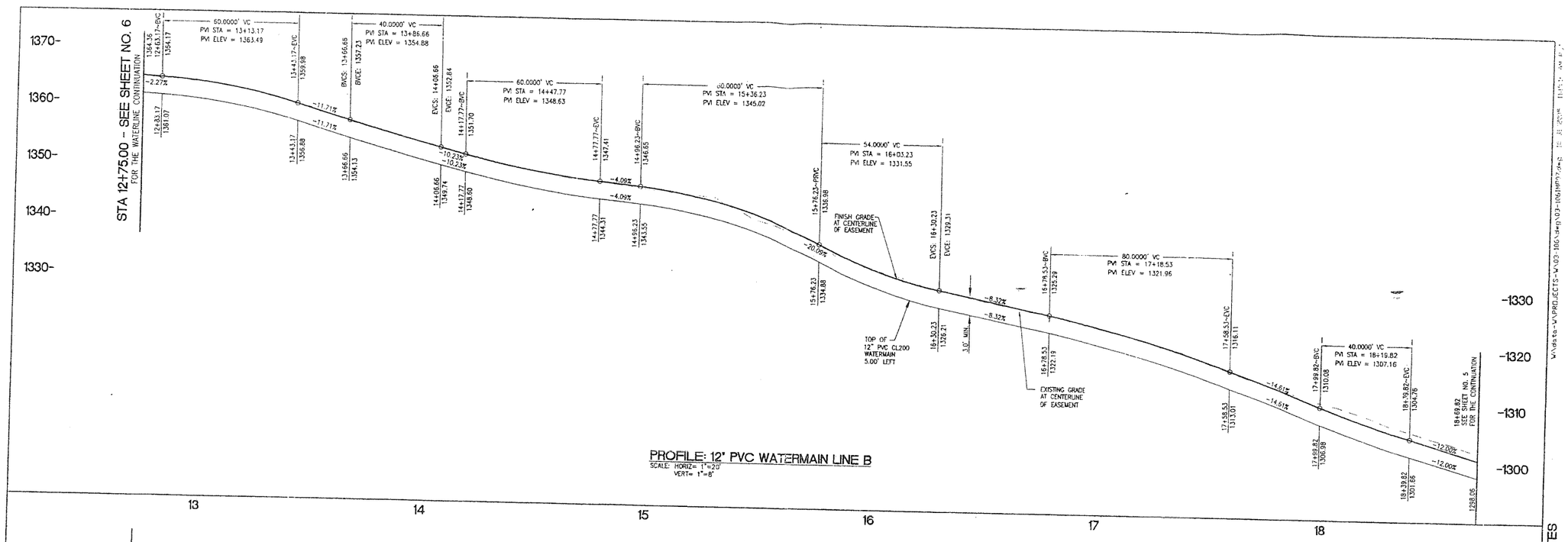
This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

_____ Deborah Bowers, Inspector (619) 669-1188 3/26/07
Authorized signature *Print name and title* *Phone* *Date*

On completion of Sections 2 and 3 by the District, applicant is to submit this form with application to:
Zoning Counter, Department of Planning and Land Use, 5201 Ruffin Road, Suite B, San Diego, CA 92123

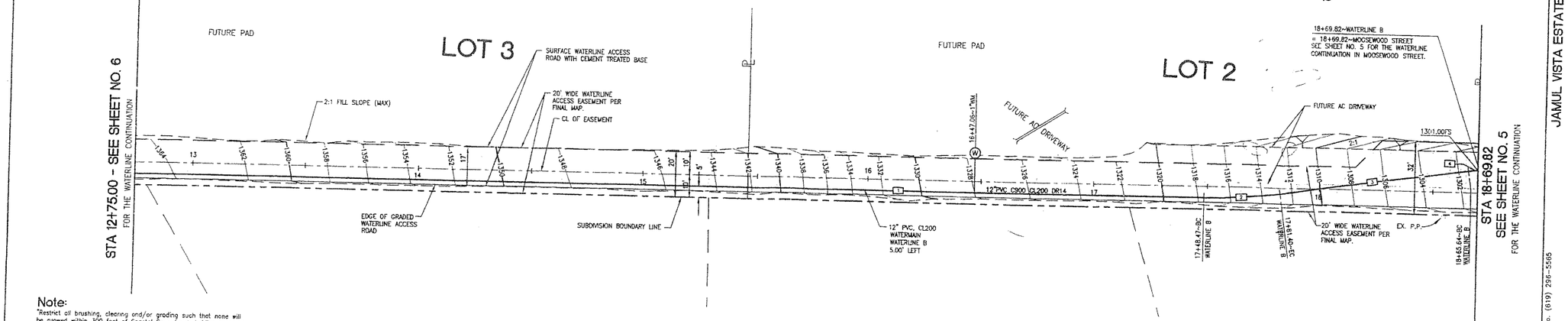
Appendix G

TM 5213 RPL-1 Map



PROFILE: 12" PVC WATERMAIN LINE B

SCALE: HORIZ= 1"=20'
VERT= 1"=8'



PLAN: 12" PVC WATERMAIN LINE B

Note:
"Restrict all brushing, clearing and/or grading such that none will be allowed within 300 feet of Coastal Sage brush habitat during the breeding season of the California Gnatcatcher. This is defined as occuring between March 1 and August 15. The Director of Planning and Land Use, may waive this condition, through written concurrence from the United States Fish and Wildlife Service and the California Department of fish and Game, that no California Gnatcatchers are present in the vicinity of the brushing, clearing or grading"

WATER DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N01°59'42"W	-	473.47'	12" PVC CL200, C900 DR14
2	N46°59'42"W	229.00'	33.04'	12" PVC CL200, C900 DR14
3	N11°15'44"W	-	85.13'	12" PVC CL200, C900 DR14
4	N01°59'42"W	229.00'	4.22'	12" PVC CL200, C900 DR14

K&S ENGINEERING
Planning Engineering Surveying
(619)295-5565 7801 Mission Center Court Suite 100 San Diego, Ca. 92108

GRAPHIC SCALE
(IN FEET)
1 inch = 20 FT.

OTAY WATER DISTRICT
W.O. 9642 DR. 9
P.Z. 1485
REVIEWED BY: DATE: 11/2/05

ENGINEER OF WORK
KAMAL S. SWEIS RCE 48592 DATE 11.3.05

REGISTERED PROFESSIONAL ENGINEER No. 48592 EXP. 6/30/06 CIVIL STATE OF CALIFORNIA

COUNTY APPROVED CHANGES

No.	Description	Approved by	Date

BENCH MARK
DESCRIPTION: COUNTY B.M. # J.M. 0185
LOCATION: IN CHURCHYARD AT THE INTERSECTION OF LYONS VALLEY RD. & JAMUL RD.
RECORD FROM: SAN DIEGO VERTICAL CONTROL
ELEVATION: 1024.076 DATUM: U.S.C. & G.S.

PRIVATE CONTRACT

SHEET 7 | COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS | 22 SHEETS

PLANS FOR THE IMPROVEMENT OF:
COUNTY OF SAN DIEGO TRACT NO. 5213 RPL-1
12" PVC WATERMAIN, LINE B
STA 12+75 TO STA 18+69.82
CALIFORNIA COORDINATE INDEX 206-1809

Recommended for approval: SUBDIVISION ENGINEER
Approved, Exception to detail for county engineering
Engineer of Work: KAMAL S. SWEIS, R.C.E. 48592 11.3.05
Checked by: TM
Approval date: 5213-1

WO 9642
PLP-04-008

JAMUL VISTA ESTATES
ENGINEER'S NAME: K & S ENGINEERING PHONE No. (619) 295-5565

DEC 10 2008

JN 1312

COUNTY OF SAN DIEGO TRACT NO. 5213 RPL-1
JAMUL VISTA ESTATES

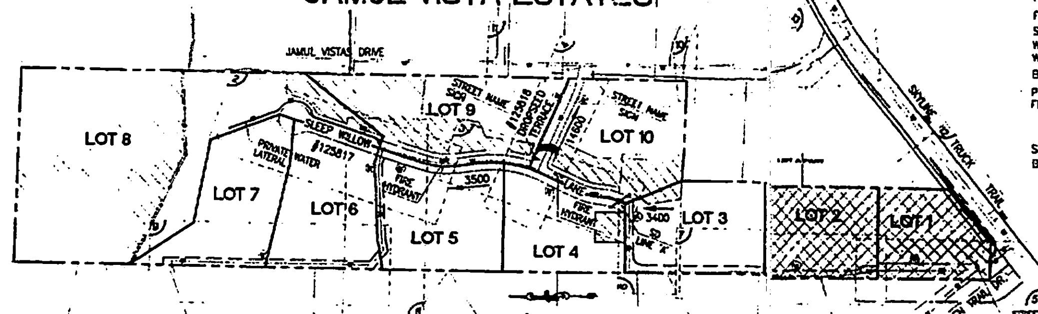
GENERAL NOTES

1. A PERMIT SHALL BE OBTAINED FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS FOR ANY WORK WITHIN THE STREET RIGHT-OF-WAY.
2. THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARDS AND AS APPROVED BY THE MATERIALS LABORATORY. THE DEVELOPER SHALL BE RESPONSIBLE TO INFORM THE COUNTY MATERIALS LAB PRIOR TO THE TEST.
3. APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
4. ALL UNDERGROUND UTILITIES AND LATERALS WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, CONNECTED AND TESTED PRIOR TO CONSTRUCTION OF DIKE, CURB, CROSS GUTTER AND PAVING.
5. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITIES SHOWN HEREON AND ANY OTHER WHICH IS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
6. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
7. THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS & ELECTRIC COMPANY PRIOR TO STARTING WORK WITH NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.
   NOTICE: ALL ELECTRICAL AND GAS SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF ELECTRICAL CABLES AND GAS PIPING AND APPURTENANCES CONTACT THE SAN DIEGO GAS & ELECTRIC COMPANY. TELEPHONE: 1-800-422-4133
8. THE CONTRACTOR SHALL NOTIFY THE PACIFIC BELL TELEPHONE COMPANY PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.
   NOTICE: ALL TELEPHONE SERVICES WITHIN THIS PROJECT BOUNDARY ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF CABLES AND APPURTENANCES, CONTACT THE PACIFIC BELL TELEPHONE COMPANY. TELEPHONE: 1-800-422-4133.
9. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS, AND BEAR THE COST OF RELOCATIONS, IF NEEDED.
10. ALL TELEVISION SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF CABLES AND APPURTENANCES, CONTACT: COX CABLE (CATV) TELEPHONE: 1-800-422-4133. SOUTHWESTERN CABLE (CATV): TELEPHONE: 1-800-422-4133.
11. ALL ELEVATIONS SHOWN IN PARENTHESES ON EXISTING STREETS ARE FROM FIELD SURVEYS BY: K & S ENGINEERING.
12. FINISHED GRADING SHALL BE CERTIFIED BY A REGISTERED CIVIL ENGINEER AND INSPECTED BY COUNTY ENGINEER FOR DRAINAGE CLEARANCE.
13. ALL SIGNS SHALL BE ALUMINUM WITH ENGINEER GRADE REFLECTIVE SHEETING, EXCEPT FOR THE FOLLOWING WHICH SHALL HAVE HIGH DENSITY REFLECTIVE SHEETING: R1, R1-2, W1, W2, W3, W4, W5, W6, W11, W14, W17, W28, W56, W57, AND, W81.
14. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
15. ALL STRIPING AND SANDBLASTING OF REDUNDANT STRIPING TO BE DONE BY CONTRACTOR.
16. NO PAVING SHALL BE DONE UNTIL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.
17. PRIVATE ROAD IMPROVEMENTS SHOWN HEREON ARE FOR INFORMATION ONLY. COUNTY OFFICIALS SIGNATURE HEREON DOES NOT CONSTITUTE APPROVAL OR RESPONSIBILITY OF ANY KIND FOR THE DESIGN OR CONSTRUCTION OF THESE PRIVATE IMPROVEMENTS.
18. CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY STRIPING OR PAVEMENT MARKERS OR LEGENDS OBLITERATED BY THE CONSTRUCTION OF THIS PROJECT.
19. CONSTRUCT PUBLIC STREET LIGHT SYSTEM CONFORMING TO SAN DIEGO COUNTY STANDARDS AND STREET LIGHT SPECIFICATIONS. POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "AS BUILT" IMPROVEMENT DRAWINGS. ALL SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT OF WAY OR WITHIN EASEMENTS DEDICATED TO THE COUNTY OF SAN DIEGO.
20. ALL CUT AND FILL SLOPES OVER THREE (3) FEET CREATED BY GRADING FOR STREETS AND DRIVEWAYS SHALL BE HYDROSEEDED WITH SAN DIEGO COUNTY APPROVED HYDROSEED MIXTURE. HYDROSEEDED SLOPES SHALL BE IRRIGATED BY WATER TRUCK UNTIL THE MIXTURE GERMINATES AND GROWTH IS ESTABLISHED.
21. ALL INTERSECTING ROADS AND DRIVEWAYS SHALL BE GRADED AND/OR RECONSTRUCTED, AS REQUIRED, TO MATCH NEW IMPROVEMENTS AND PROVIDE SMOOTH TRANSITION.
22. C.M.P. STORM DRAINS SHALL BE CERTIFIED BY THE DEVELOPER'S SOILS ENGINEER TO HAVE A 50 YEAR SERVICE LIFE FOR THE PARTICULAR SOIL AND LOCATION SHOWN ON THE PLANS. THIS CERTIFICATION SHALL BE MADE PRIOR TO THE INSTALLATION OF THE STORM DRAIN.

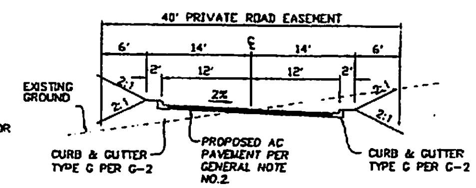
REFERENCE DRAWINGS

TPM 19843 IMPROVEMENT PLANS
TM 4724-1 IMPROVEMENT PLAN
TM 4187 GRADING & IMPROVEMENT PLANS
TM 4187 GRADING & IMPROVEMENT PLANS

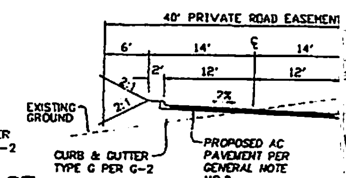
K&S ENGINEERING
Planning Engineering Surveying
(619)296-5565 7801 Mission Center Court, Suite 100 San Diego Ca. 92108



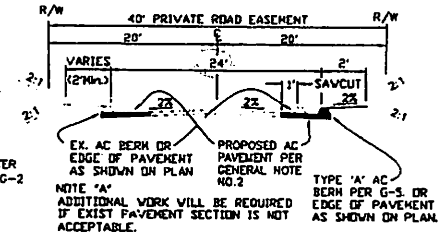
KEY/INDEX MAP
SCALE: 1"=200'



SLEEP WILLOW LANE AND DROPSEED TERRACE
TYPICAL STREET SECTION
NOT TO SCALE



DRIVEWAY LOTS 1 AND 2
TYPICAL SECTION
NOT TO SCALE



PROPOSED JAMUL VISTAS DRIVE
TYPICAL STREET SECTION
NOT TO SCALE

NOTIFICATIONS

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UNDERGROUND SERVICE ALERT (PHONE: 1-800-422-4133) TWO WORKING DAYS IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.
2. FOR ANY QUESTIONS REGARDING THE MARK-OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANY.
3. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
4. CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER'S OFFICE 48 HOURS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT. PHONE: (619) 694-3165.
5. THE CONTRACTOR SHALL GIVE 24 HOURS NOTICE ON CALLS FOR INSPECTION. PHONE: (619)694-3165. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION WILL BE SUBJECT TO REJECTION AND REMOVAL.

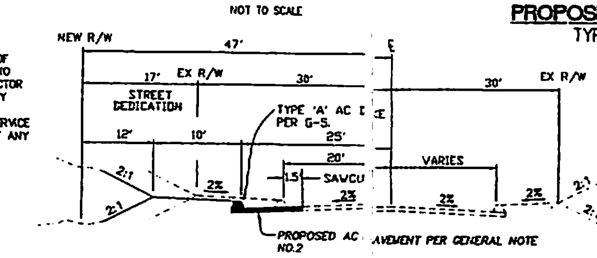
EARTHWORK QUANTITIES:

CUT – 2:1 FOR MINOR SLOPES. 2:1 FOR MAJOR SLOPES
FILL – 2:1
QUANTITIES:
EXCAVATION: 20,073 CUBIC YARDS (RD UNDERCUT INCLUDED)
FILL 1,397 CUBIC YARDS EXPORT: 18,676 CUBIC YARDS
(NOTE: A SEPARATE VALID PERMIT MUST EXIST FOR EITHER WASTE OR IMPORT AREAS)

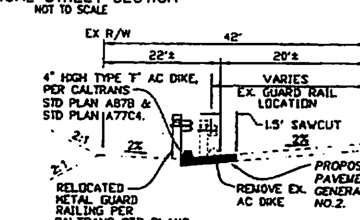
EARTHWORK QUANTITIES NOTE:

EARTHWORK QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY. ACTUAL QUANTITIES MAY VARY WITH SHRINKAGE, LOSSES DUE TO CLEARING OPERATIONS, COMPACTION, SETTLEMENT, ETC. CONTRACTOR SHOULD VERIFY QUANTITIES PRIOR TO BIDDING.

SHEET INDEX



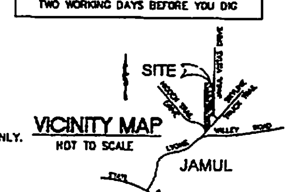
PROPOSED SKYLINE TRUCK TRAIL
TYPICAL STREET SECTION
STA 90+00 TO STA 93+03.21
NOT TO SCALE



PROPOSED SKYLINE TRUCK TRAIL
TYPICAL STREET SECTION
STA 94+56.24 TO 96+04.22
NOT TO SCALE

IMPORTANT NOTICE

SECTION 4215/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER TO BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. PER YOUR DIG ALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 TWO WORKING DAYS BEFORE YOU DIG



VICINITY MAP
NOT TO SCALE

SPECIFIC CONDITIONS NOTES

A. RESTRICT ... LL BRUSHING, CLEARING AND/OR GRADING SUCH THAT NONE WILL BE ALLOWED WIT... N 300 FEET OF COASTAL SAGE SCRUB HABITAT DURING THE BREEDING SEASONS OF ... HE CALIFORNIA GNATCATCHER. THIS IS DEFINED AS OCCURRING BETWEEN MARCH 1 AN... AUGUST 15. THE DIRECTOR OF PLANNING AND LAND USE, MAY WAIVE THIS CONDITION, T... ROCH WRITTEN CONCURRENCE FROM THE UNITED STATES FISH AND WILDLIFE SERVICE AND ... HE CALIFORNIA DEPARTMENT OF FISH AND GAME, THAT NO CALIFORNIA GNATCACHERS ... ARE PRESENT IN THE VICINITY OF THE BRUSHING, CLEARING OR GRADING.

B. TEMPORAR... FENCES (MINIMALLY 4-FOOT BARRIER FENCING) SHALL BE PLACED TO PROTECT ALL ... PEN SPACE EASEMENTS SHOWN ON THE TENTATIVE MAP WHICH PRECLUDE GRADING, OR ... RUSHING OR CLEARING. THE SUBDIVIDER SHALL SUBMIT TO THE DEPARTMENT ... F PLANNING AND LAND USE A STATEMENT FROM A CALIFORNIA REGISTERED ENGINEER, O... LICENSED SURVEYOR THAT TEMPORARY FENCES HAVE BEEN PLACED IN ALL LOCATIONS O... THE PROJECT WHERE PROPOSED GRADING OR CLEARING IS WITHIN 100 FEET OF AN OPEN ... PACE EASEMENT BOUNDARY. THE TEMPORARY FENCE LOCATION SHALL BE IDENTIFIED IN ... HE FIELD BY A CALIFORNIA REGISTERED ENGINEER OR LICENSE SURVEYOR AND POSITIO... D BETWEEN THE OPEN SPACE EASEMENT BOUNDARY AND ANY AREA OF PROPOSED DI... URBANCE. THE TEMPORARY FENCING SHALL BE REMOVED ONLY AFTER THE CONCLUSION ... SUCH ACTIVITY.

C. PERMANET ... FENCES (MINIMAL 4-FOOT SPLIT RAIL FENCING) SHALL BE PLACED ALONG THE OPEN S... CE BOUNDARY OF LOT #7 LOT #8. THE PROPERTY OWNER SHALL SUBMIT TO THE DIRE... OR, DEPARTMENT OF PLANNING AND LAND USE A SIGNED, STAMPED STATEMENT F... M A CALIFORNIA REGISTERED ENGINEER, OR LICENSED SURVEYOR THAT PERMANENT ... NCES OR WALLS HAVE BEEN PLACED TO PROTECT FROM INADVERTENT DISTURBANCE ... F ALL OPEN SPACE EASEMENT(S) THAT DO NOT ALLOW GRADING, BRUSHING, OR CLEARING ... PERMANENT FENCING OR WALLS ARE REQUIRED ALONG THE NORTHERN BORDER OF ... T #7 AND LOT #8, AS DECLINED ON THE THE TENTATIVE MAP WITHIN THE BIOLOGICAL R... SOURCES REPORT DATED JUNE 25, 2002, AND THE OPEN SPACE FENCING AND SIGNAE ... HIBIT DATED JUNE 20, 2002, ON FILE AS LOG NO. 78-19-101A WITH THE DEPARMENT ... PLANNING AND LAND USE AT THE CONCLUSION OF THE GRADING ACTIVITY, AND PRIOR T... THE RECORD PLAN APPROVAL. THE PERMANENT FENCE LOCATIONS SHALL BE IDENTIFIED IN ... HE FIELD BY A CALIFORNIA REGISTERED ENGINEER OR LICENSES SURVEYOR AND POSITION... JUST OUTSIDE OF THE OPEN APACE EASEMENT. PHOTOGRAPHS AND A BRIEF DESCRI... ION OF DESIGN AND MATERIALS USED SHALL BE SUBMITTED WITH THE STATEMENT F... M THE CALIFORNIA REGISTERED ENGINEER. CONSTRUCTION MATERIALS AND FENCE AND/C... WALL DESIGN ARE SUBJECT TO APPROVAL BY THE DEPARMENT OF PLANNING AN... LAND USE. MINIMUN FENCE OR WALL HEIGHT SHALL BE FOUR FEET.

LEGEND

OPEN SPACE EASEMENT	
NOISE PROTECTION EASEMENT	
FIRE HYDRANT	
STREET NAME SIGN	
WATER SERVICE	
WATERMAIN	
BLOCK NUMBER	14600
PERMANENT OPEN SPACE FENCING LOCATION	

SLEEP WILLOW LANE #125817
BLOCK RANGES 3400-3599
DROPSEED TERRACE #125818
BLOCK RANGES 14600 14699

WORK TO BE DONE:

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS, THE CURRENT COUNTY OF SAN DIEGO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND SPECIAL PROVISIONS, THE CURRENT SAN DIEGO REGIONAL STANDARDS DRAWINGS, THE CURRENT GRADING ORDINANCES FOR DESIGN AND CONSTRUCTION STANDARDS OF THE COUNTY OF SAN DIEGO AND THE W.A.S. ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE COUNTY ENGINEER PRIOR TO ANY REQUEST FOR INSPECTION.

LEGEND:

STREET	SDRSD NO.	SYMBOL
AC PAVING (PER GENERAL NOTE 2)	-	
P.C.C DRIVEWAY	SEE SECTION A-A, SHEET NO. 2	
6" CURB & GUTTER, TYPE 'G'	SDRSD G-2	
AC DIKE, TYPE 'A'	SDRSD G-5	
PRIVATE DRIVEWAY (SIZE PER PLAN)	DS-7	
STREET NAME SIGN	DS-13	
PERMANENT OPEN SPACE BARRIER FENCE	-	
METAL BEAM GUARD RAILING	CALTRANS A77E1&E2	
WATER		
12" PVC WATERMAIN	WP-01,02	
12" RSGV	WV-01	
FIRE HYDRANT	WF-01	
2" AIR & VACCUM RELEASE VLAVE	WA-01,01,03	
2" BLOW OFF	WB-01,04	
CONC THRUST BLOCK	WT-01	
1" WATER SERVICE LATERAL	WS-01	(1")
DRAINAGE		
STORM DRAIN PIPE (HDPE). (SIZE PER PLAN)	-	
CONC BROW DITCH (TYPE PER PLAN)	SDRSD D-75	
WING TYPE HEADWALL	SDRSD D-34	
RIP RAP ENERGY DISSIPATOR (TYPE & SIZE PER PLAN)	SDRSD D-40.	
EXISTING STORM DRAIN		EX 36"RCP
CORRUGATED STEEL PIPE INLET	SDRSD D-16	

ASSESSORS PARCEL:

519-093-36

SITE ADDRESS:

SKYLINE TRUCK TRAIL, JAMUL, CALIFORNIA

DECLARATION OF RESPONSIBLE CHARGE:

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO AND THE OTAY WATER DISTRICT IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

[signature] 11/3/05
KAMAL S. SWEIS R.C.E. 48592 EXP. 06/03/06 DATE

REGISTERED PROFESSIONAL ENGINEER KAMAL S. SWEIS No. 48592 CIVIL STATE OF CALIFORNIA

OWNER'S CERTIFICATE

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT OWNER (DEVELOPER) SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES, ALTERATIONS, OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES TO BE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS. I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING COUNTY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

OWNER: [signature] 11/7/05
OWNER: JAMUL VISTA ESTATES, L.L.C. DATE
RANDY SMITH

ADDRESS: 1735 MALLOW COURT
CARLSBAD, CA 92009
TELEPHONE: (760) 438-7840 (FAX) 760-438-1739

AUTHORIZED NAME: RANDY SMITH

I, Certify that the private road improvements as shown on this plan satisfies the requirements as stated in the resolution for TM 5213-1 and the standard for, private roads.
BY: [signature] DATE: 11/3/05
NAME: KAMAL S. SWEIS
RCE NO: 48592 EXPIRES: 6-30-06
INSPECTION BY: ENGINEER OF WORK / ✓ COUNTY
SECURITY REQUIRED: ✓ YES / NO

The COUNTY is not liable for the design in anyway, reviewed for CLARITY only.
BY: [signature] DATE: 11/21/05
FOR: COUNTY ENGINEER

WATER NOTES:

SEE SHEET NO. 2

OTAY WATER DISTRICT
W.O. 9642 I.D. 9
PLP-04-008
P.Z. 1485
[signature] 11/3/05
ROD POSADA RCE 54504 EXP: 12-31-05 DATE:
[signature] 11/3/05
REVIEWED BY: DATE:

FIRE AGENCY
RURAL FIRE PROTECTION DISTRICT
REVIEWED BY: [signature]
DATE: 11-3-2005

COUNTY OF SAN DIEGO DEPARTMENT OF PLANNING AND LAND USE
APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW
APPROVED BY: ____
DATE: ____

COUNTY APPROVED CHANGES			
No.	Description	Approved by:	Date

PERMITS

ADMINISTRATIVE PERMIT NO.	N/A
REZONE PERMIT NO.	N/A
GRADING PLAN NO	L-14629
SPECIAL USE PERMIT NO.	N/A
TENTATIVE MAP NO.	5213 RPL-1
N.O.I. #	9 37C332817

BENCH MARK
DESCRIPTION: COUNTY B.M. # J.M. 0185
LOCATION: IN CHURCHYARD AT THE INTERSECTION OF LYONS VALLEY RD. & JAMUL RD.
RECORD FROM: SAN DIEGO VERTICAL CONTROL
ELEVATION: 1024.076 DATUM: U.S.C. & G.S.

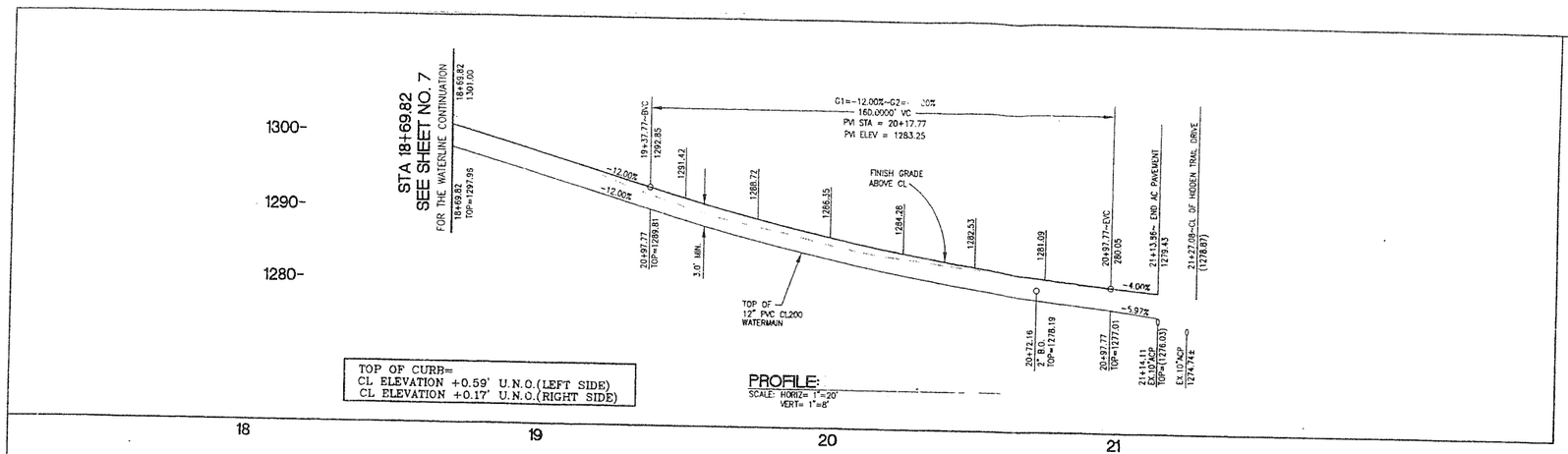
PRIVATE CONTRACT
SHEET 1 — COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS — 22 SHEETS
PLANS FOR THE IMPROVEMENT OF:
COUNTY OF SAN DIEGO TRACT NO. 5213 RPL-1
TITLE SHEET
CALIFORNIA COORDINATE INDEX: 206-1809
Recommended for approval: SUBDIVISION ENGINEER
Approved: [signature] 11/21/05 for county engineering
Engineer of work: [signature] 11/13/05 KAMAL S. SWEIS R.C.E. 48592
Checked by / Approved date
TM 5213-1

WO 9642
PLP-04-008

JAMUL VISTA ESTATES

ENGINEER'S NAME: K & S ENGINEERING PHONE No. (619) 296-5565

V:\data-V\PROJECTS-V\03-106\dwg\03-106IMP01.dwg 10/31/2005 10:10:52 AM PST



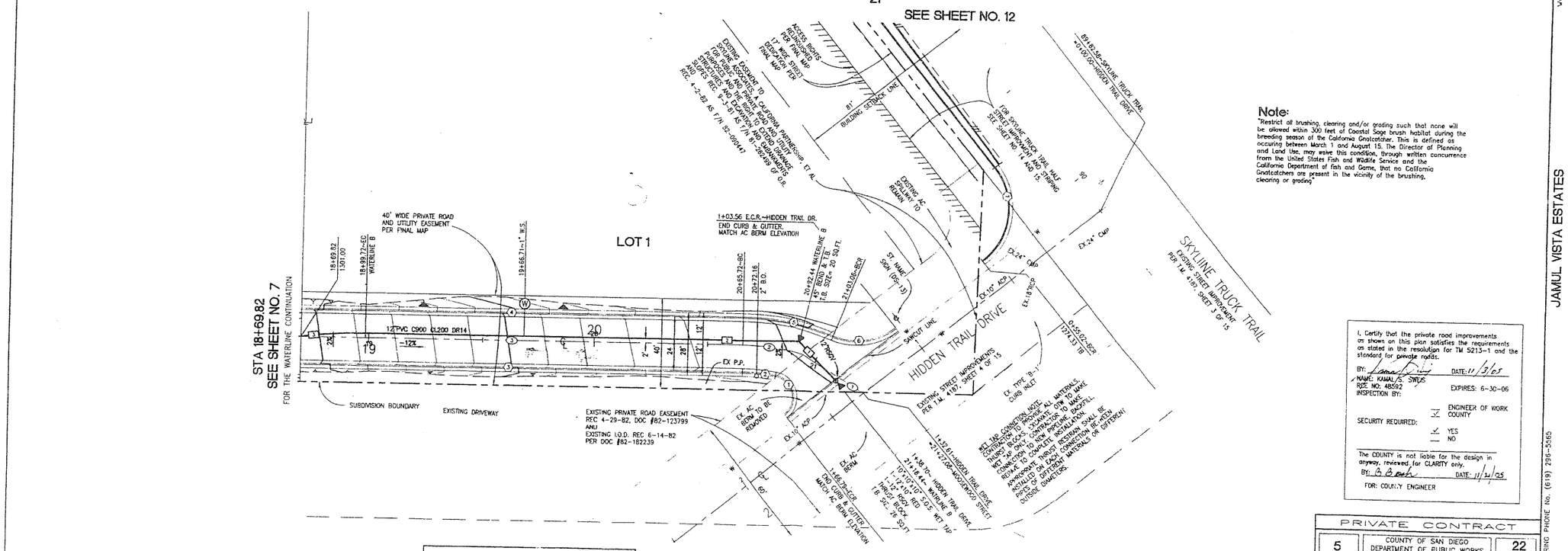
CENTERLINE DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N23°01'40"W	–	31.93'	–
2	Δ=15°02'03"	100.00'	27.98'	CENTERLINE
3	N01°59'42"W	–	195.90'	CENTERLINE

CURB DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	Δ=13°20'57"	10'	22.92'	CURB & GUTTER, TYPE G (G-2)
2	Δ=09°50'47"	88'	15.12'	CURB & GUTTER, TYPE G (G-2)
3	N01°59'42"W	–	195.90'	CURB & GUTTER, TYPE G (G-2)
4	N01°59'42"W	–	195.90'	CURB & GUTTER, TYPE G (G-2)
5	Δ=21°23'50"	112'	41.42'	CURB & GUTTER, TYPE G (G-2)
6	Δ=60°47'58"	28'	29.71'	CURB & GUTTER, TYPE G (G-2)
7	Δ=90°01'32"	30'	47.14'	CURB & GUTTER, TYPE G (G-2)

WATER DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N43°00'18"E	–	26.00'	12" PVC CL200, C900 DR14
2	N01°59'42"W	–	221.47'	12" PVC CL200, C900 DR14
3	Δ=08°16'02"W	229.00'	28.82'	12" PVC CL200, C900 DR14

SEE SHEET NO. 12

Note:
"Restrict all brushing, clearing and/or grading such that none will be allowed within 300 feet of Coastal Sage brush habitat during the breeding season of the California Gnatcatcher. This is defined as occuring between March 1 and August 15. The Director of Planning and Land Use, may waive this condition, through written concurrence from the United States Fish and Wildlife Service and the California Department of fish and Game, that no California Gnatcatchers are present in the vicinity of the brushing, clearing or grading



I, Certify that the private road improvements as shown on this plan satisfies the requirements as stated in the resolution for TM 5213-1 and the standard for private roads.

BY: _____ DATE: 11/3/05

NAME: KAMAL S. SWEIS
RCE NO. 48592 EXPIRES: 6-30-06

INSPECTION BY:
__ ENGINEER OF WORK
_✓_ COUNTY

SECURITY REQUIRED:
_✓_ YES
___ NO

The COUNTY is not liable for the design in anyway, reviewed for CLARITY only.
BY: _____ DATE: 11/2/05
FOR: COUNTY ENGINEER

K&S ENGINEERING
Planning Engineering Surveying
(619)296-5565
7801 Mission Center Court, Suite 100
San Diego Ca. 92108

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

OTAY WATER DISTRICT
WO. 9642 ID. 9
PZ. 1485
REVIEWED BY: _____ DATE: 11/3/05

ENGINEER OF WORK
KAMAL S. SWEIS RCE 48592 DATE 11.3.05

COUNTY APPROVED CHANGES

No.	Description	Approved by	Date

BENCH MARK
DESCRIPTION: COUNTY B.M. # J.M. 0185
LOCATION: IN CHURCHYARD AT THE INTERSECTION OF LYONS VALLEY RD. & JAMUL RD.
RECORD FROM: SAN DIEGO VERTICAL CONTROL
ELEVATION: 1024.076 DATUM: U.S.C. & G.S.

PRIVATE CONTRACT

5	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	22 SHEETS

PLANS FOR THE IMPROVEMENT OF:
COUNTY OF SAN DIEGO TRACT NO. 5213 RPL-1
MOOSEWOOD STREET PRIVATE ROAD PER 3.1.c
CALIFORNIA COORDINATE INDEX 206-1809

Recommended for approval: N/A — SUBDIVISION ENGINEER	Approved: PRIVATE ROAD, SEE ABOVE
Engineer of work: KAMAL S. SWEIS RCE 48592 11/3/05	Checked by / Approved date: TM 5213-1

WO 9642
PLP-04-008

JAMUL VISTA ESTATES

ENGINEER'S NAME, K & S ENGINEERING PHONE No. (619) 296-5565

V:\data\V-PROJECTS-V\03-1961\dwg\03-1961MPDS.dwg 10/26/2005 11:19 AM PT

DEC 10 2008

Appendix H

Vegetation Map

Biological Resources

The Sajady Subdivision Project
APN 519-094-16

LEGEND

= Diegan Coastal Sage Scrub (Holland Code #32500)

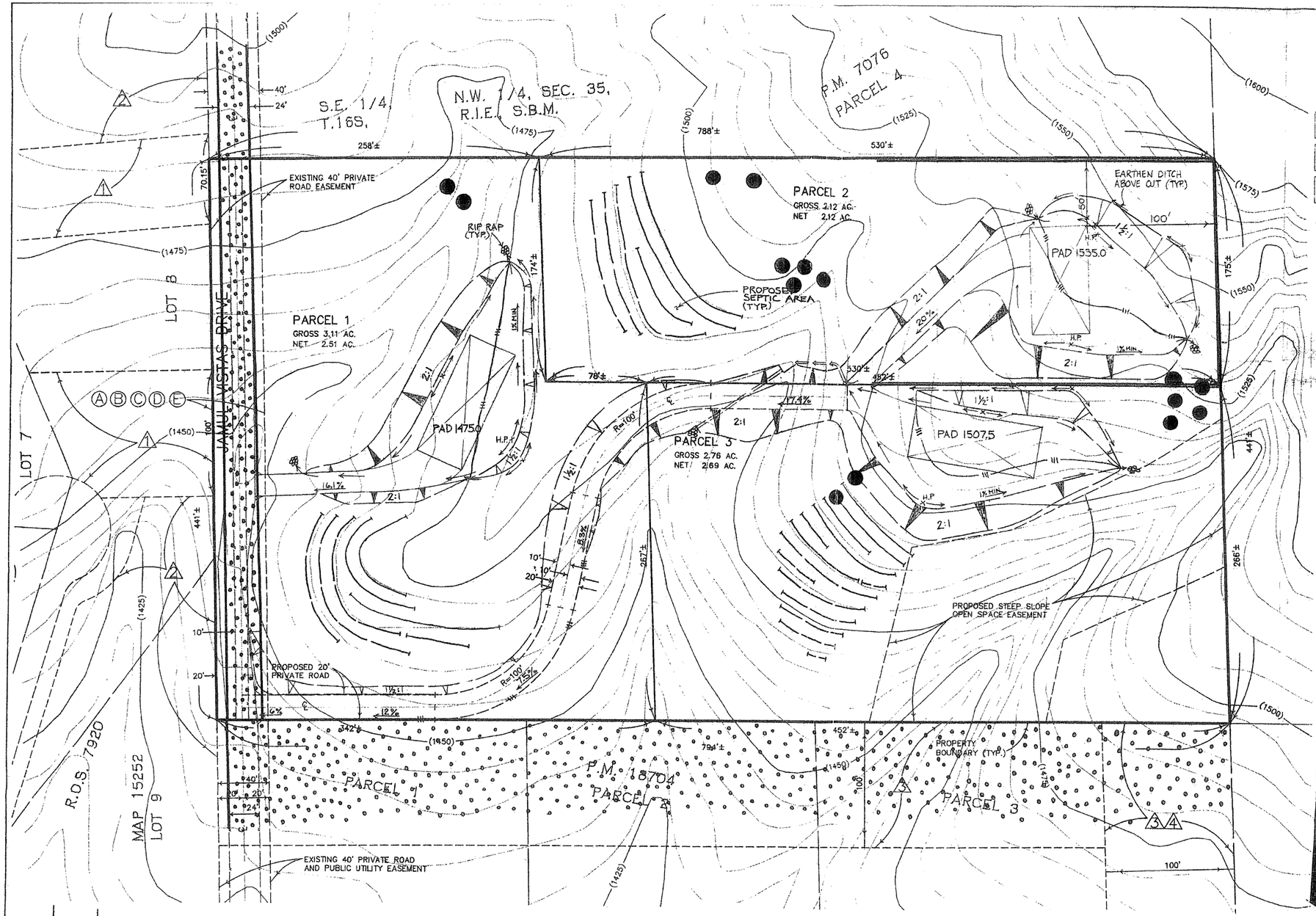
= Urban/Developed (Holland Code #12000)

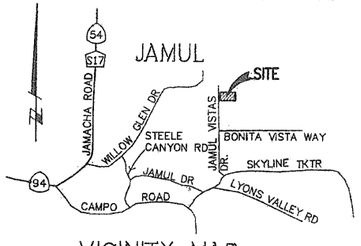
= Orange-throated Whiptail

Not Shown:
San Diego County Viguiera (co-dominant in the CSS)

Prepared by:

VINCENT N. SCHEIDT, MA
CERTIFIED BIOLOGICAL CONSULTANT
3170 Occidental Street • San Diego, CA 92122 • (858) 457-3873





VICINITY MAP

NOT TO SCALE
T.B.; 1273, A-6

(A) EXISTING 40' I.O.D. GRANTED TO THE COUNTY OF SAN DIEGO PER DOC. 78-087975; REC. MARCH 6, 1978 OF O.R.

(B) EXIST. 40' ROAD AND UTILITY EASEMENT PER INST. 86-141647; REC. APRIL 11, 1986 OF O.R.

(C) EXIST. 40' OTAY WATER EASEMENT PER INST. 88-307582; REC. JUNE 27, 1988 OF O.R.

(D) EXIST. 40' SDG&E PUBLIC UTILITY EASEMENT PER INST. 1991-0089779; REC. MARCH 1, 1991 OF O.R.

(E) EXIST. 40' PACIFIC BELL PUBLIC UTILITY EASEMENT PER INST. 90-636036; REC. NOVEMBER 29, 1990 OF O.R.

1. OPEN SPACE EASEMENT GRANTED TO THE COUNTY OF SAN DIEGO PER DOC. NO. 2005-0856579, REC. OCTOBER 4, 2005.

2. FIRE CLEARING EASEMENT GRANTED TO THE COUNTY OF SAN DIEGO PER DOC. NO. 2005-0866580, REC. OCTOBER 4, 2005.

3. FIRE CLEARING EASEMENT GRANTED TO THE COUNTY OF SAN DIEGO PER PARCEL MAP 18704.

4. I.O.D. IN FAVOR OF SAN DIEGO COUNTY FOR FUEL BREAK RECORDED MAY 3, 1973 AS FILE NO. 73-004818 OF OFFICIAL RECORDS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

OWNER:
MUCHTAR SAJADY AND
FATIMA SAJADY
10482 MISSISSIPPI BLVD.
COON RAPIDS, MN 55433
(612) 716-3617

PROJECT ADDRESS:
3551 JAMUL VISTAS DRIVE
JAMUL, CA

APN:
519-094-16

LEGAL DESCRIPTION:
PARCEL 3 OF PARCEL MAP 7076

SOURCE OF EXISTING TOPOGRAPHY:
COUNTY 200 SCALE TOPOGRAPHIC SURVEY SHEET 206-1815, PHOTOGRAPHY DATED: MAY 1981

PREPARED BY:

CREW ENGINEERING AND SURVEYING
5725 KEARNY VILLA ROAD, STE. "D"
SAN DIEGO, CA. 92123
(858) 571-0555

RONALD C. ASHMAN
RCE 34300 EXPIRES: SEPT. 30, 2007

PRELIMINARY GRADING PLAN

JAMUL VISTAS DRIVE (JAMUL)

DATE: 11/01/06
SCALE: 1"=40'
DRAWN: S.G.
APPROVED: R.A.
JOB: 1342
SHEET: 1 OF 1

J.N. 1342

FEB 2 7 2008

Appendix I

Otay Water District Flow Letter

JN 1342
6/1/09
Sajnoly
TPM

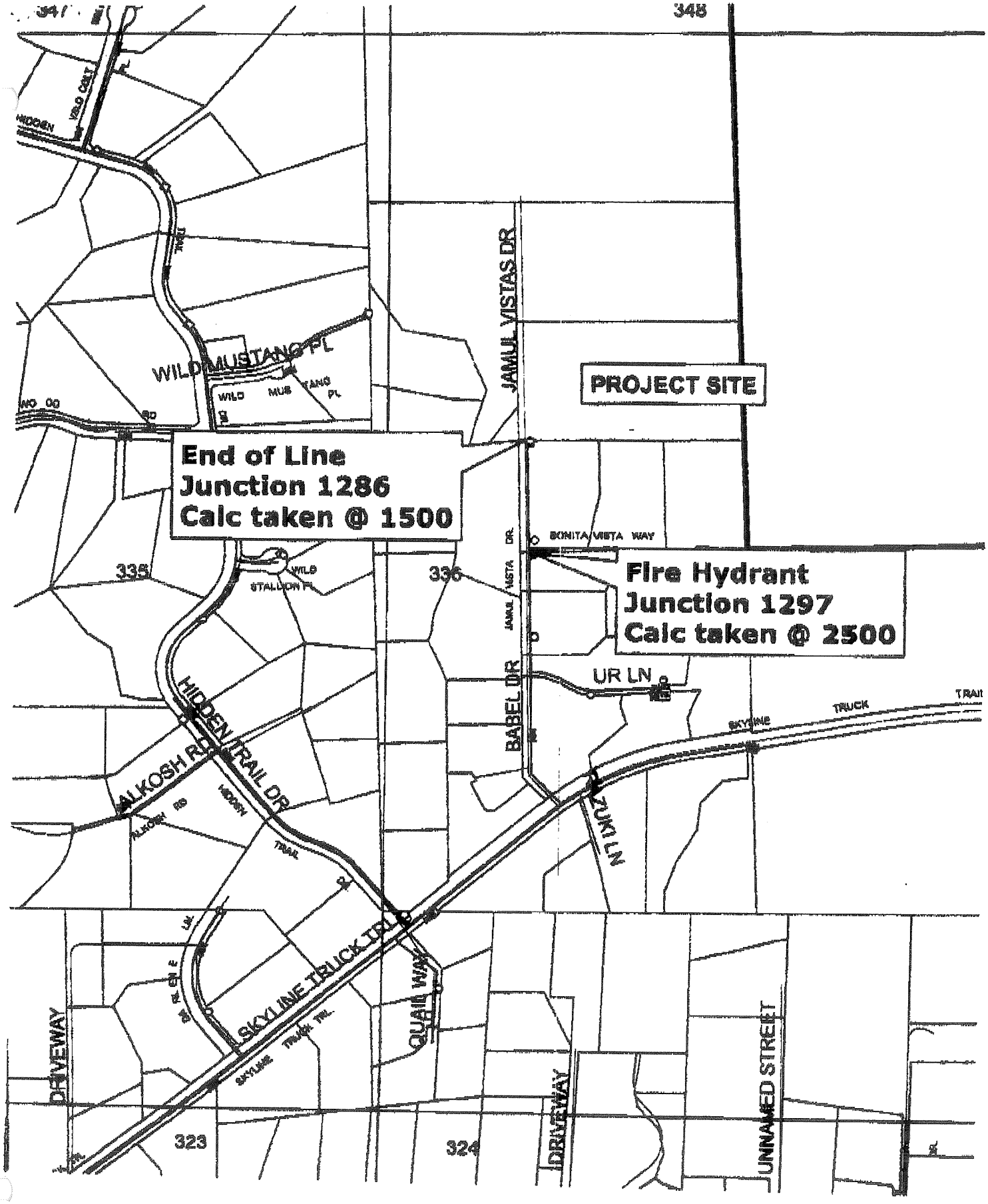
OTAY WATER DISTRICT
2554 SWEETWATER SPRINGS BLVD
SPRING VALLEY, CA 91978
PH: (619) 670-2241
FAX: (619) 670-6184

FACSIMILE TRANSMITTAL SHEET

TO: Rusty Otten	FROM: Tanya Romero
COMPANY: Crew Engineering and Surveying	DEPARTMENT: Public Services Engineering
FAX NUMBER: (858) 571-0562	TOTAL NO. OF PAGES INCLUDING COVER: 6
	DATE: 6/1/09
OTAY PERMIT(S): n/a	

☐ Urgent ☑ For Review ☐ Please Comment ☐ Please Reply ☐ For Your Information

NOTES/COMMENTS:


348
JAMUL VISTAS DR
PROJECT SITE
End of Line
Junction 1286
Calc taken @ 1500
SKINITA VISTA WAY
Fire Hydrant
Junction 1297
Calc taken @ 2500
335
336
WILD STALLION PL
HIDDEN TRAIL DR
BABEL DR
UR LN
TRUCK TRAIL
SKYLINE
ZUKI LN
ALKOSH RD
QUAIL WAY
SKYLINE TRUCK TRL
DRIVEWAY
323
324
DRIVEWAY
UNNAMED STREET

OTAY
...Dedicated to Community Service
2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2004
TELEPHONE: 670-2222, AREA CODE 619 www.otaywater.gov

June 1, 2009

Project: p1438-030000
Activity: 3104

Attention: Rusty Otten
Crew Engineering and Surveying
5725 Kearny Villa Rd., Suite D.
San Diego, CA 92123

SUBJECT: Fire flow calculations for 3551 Jamul Vistas Dr., APN: 519-094-16-00

Mr. Otten:

Fire flow calculations for the subject site were performed by District staff using MWH Soft, Inc., H_2O map water, Version 6.0, under the following assumptions:

a. The water level in the storage facility at the time of a fire is at the minimum operational level that typically occurs during peak-hour demand conditions.
b. The prescribed *two hour* fire duration coincides with a maximum day demand condition.
c. Into and out of the pressure zone where a fire is occurring, all Agency booster pumps are off.
d. Areas outside the fire circumference in the same pressure zone maintain a minimum pressure of 20 PSI.
e. Current static pressure based on hydraulic grade line calculations is: 24.6

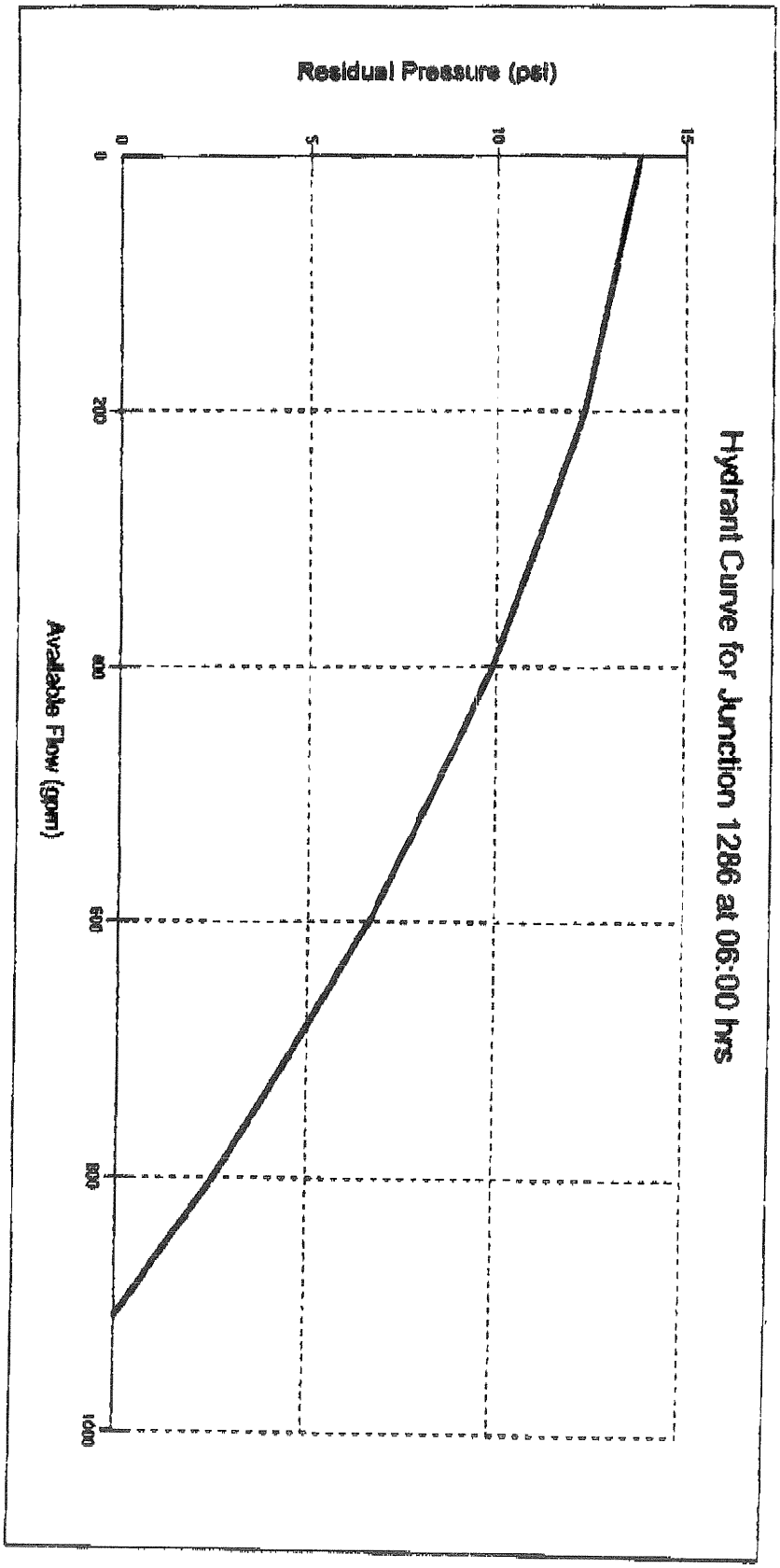
The results are as follows:

STATIC PRESSURE:	13.7	PSI *(System demand only at maximum day condition)*
RESIDUAL PRESSURE:	17.8	PSI *(System and fire flow demand of 1500 gallons per minute)*
FLOW @ 40 PSI:	(1,634.5)	GPM
FLOW @ 20 PSI:	(791.1)	GPM

A hydrant system curve is also attached for your reference.

Sincerely,

THE OTAY WATER DISTRICT
ENGINEERING PUBLIC SERVICES



FLOW AT END OF PIPE

OTAY WATER DISTRICT
...Dedicated to Community Service
2554 SWEETWATER SPRINGS BOULEVARD, SPRING VALLEY, CALIFORNIA 91978-2004
TELEPHONE: 670-2222, AREA CODE 619 www.otaywater.gov

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a. The water level in the storage facility at the time of a fire is at the minimum operational level that typically occurs during peak-hour demand conditions.
b. The prescribed *two hour* fire duration coincides with a maximum day demand condition.
c. Into and out of the pressure zone where a fire is occurring, all Agency booster pumps are off.
d. Areas outside the fire circumference in the same pressure zone maintain a minimum pressure of 20 PSI.
e. Current static pressure based on hydraulic grade line calculations is: 41.2

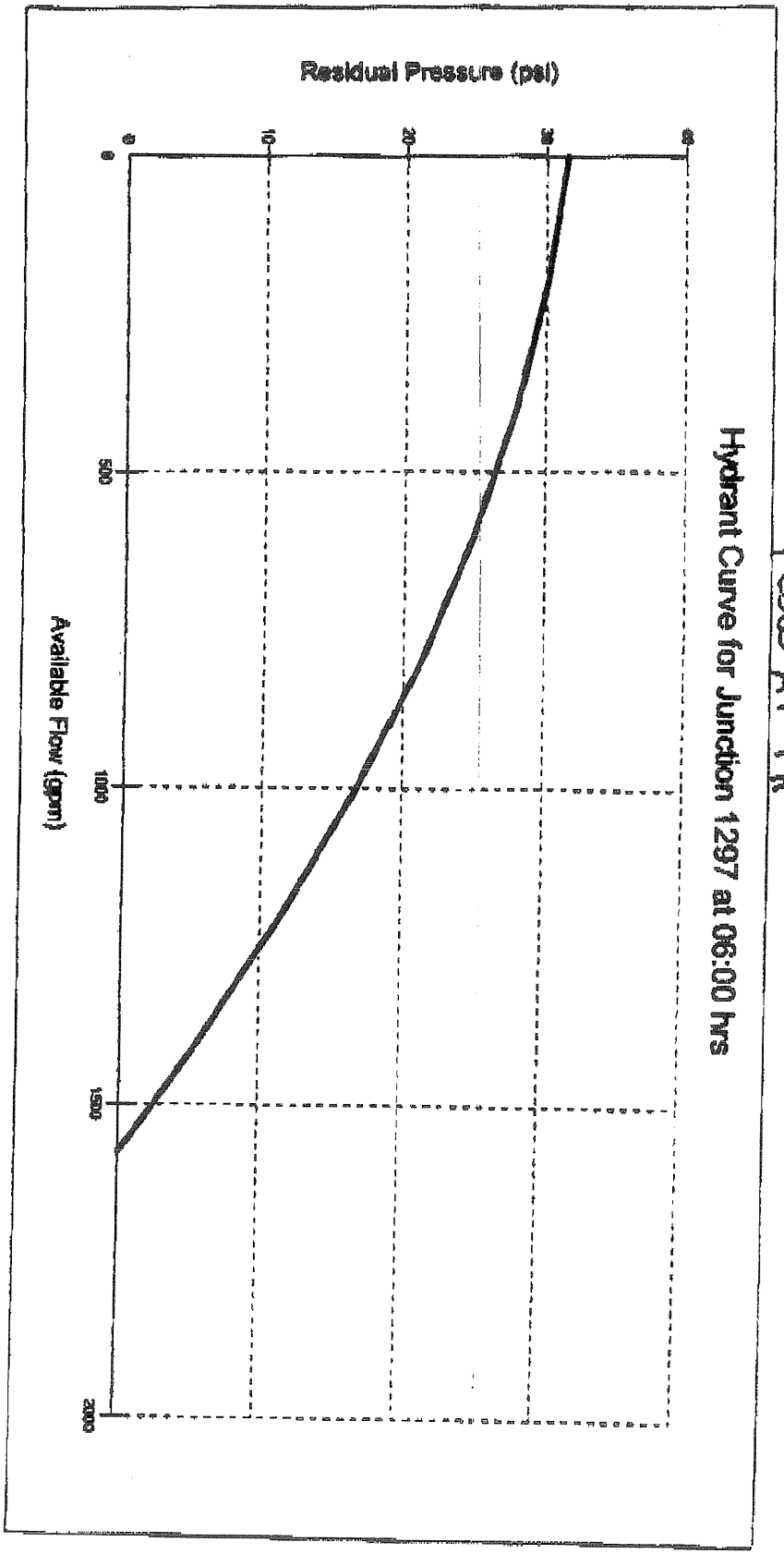
The results are as follows:

STATIC PRESSURE:	31.5	PSI *(System demand only at maximum day condition)*
RESIDUAL PRESSURE:	37.9	PSI *(System and fire flow demand of 2500 gallons per minute)*
FLOW @ 40 PSI:	(989.3)	GPM
FLOW @ 20 PSI:	854.6	GPM

A hydrant system curve is also attached for your reference.

Sincerely,

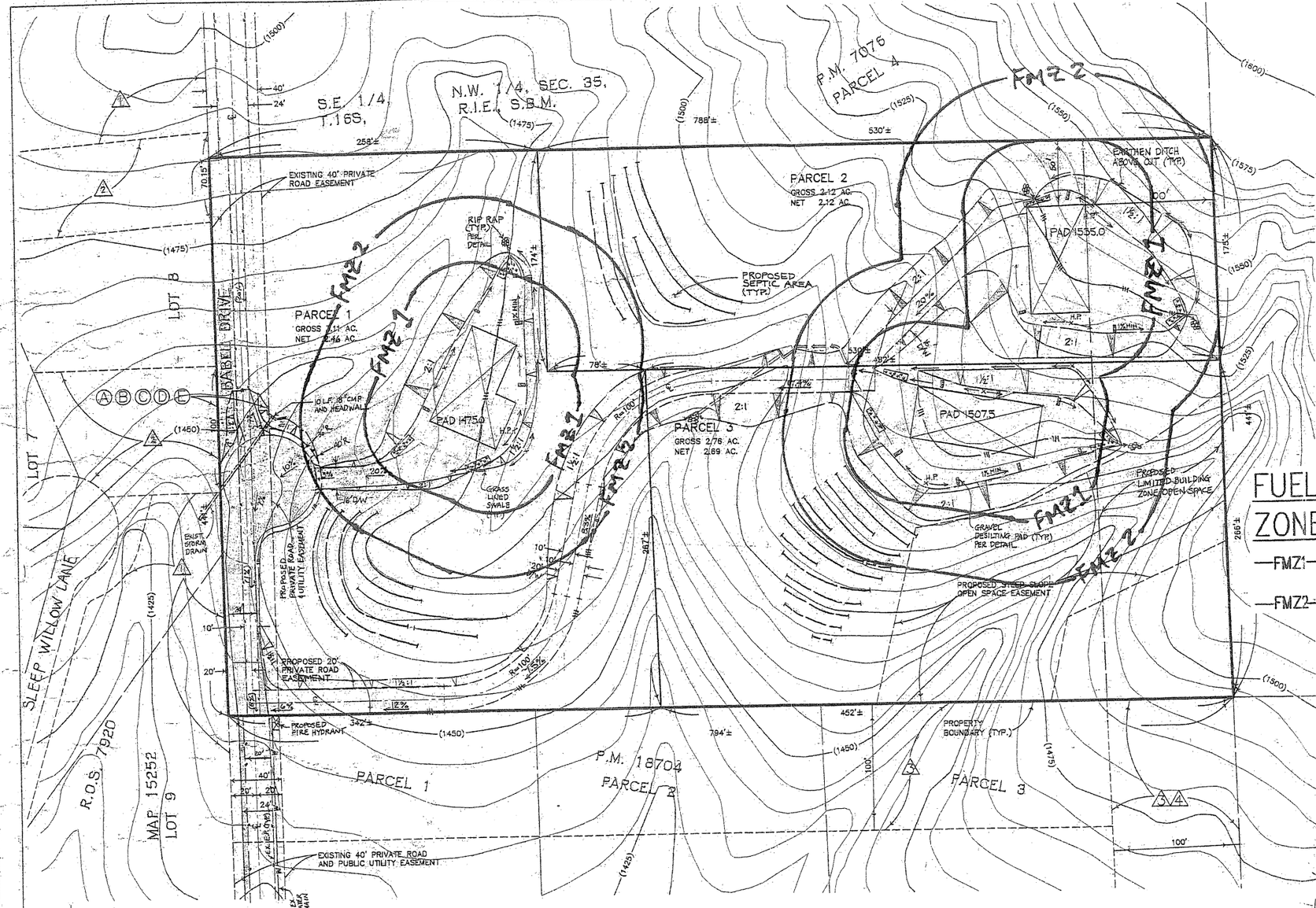
THE OTAY WATER DISTRICT
ENGINEERING PUBLIC SERVICES

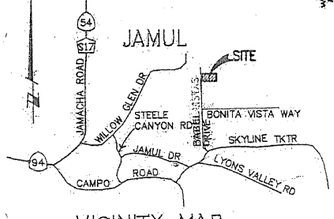

Residual Pressure (psi)
0
10
20
30
40
500
1000
1500
2000
Available Flow (gpm)
Hydrant Curve for Junction 1297 at 06:00 hrs

Flow AT FH

Appendix K

Fuel Modification map





(A) EXISTING 40' I.O.D. GRANTED TO THE COUNTY OF SAN DIEGO PER DOC. 75-087975; REC. MARCH 8, 1975 OF O.R.

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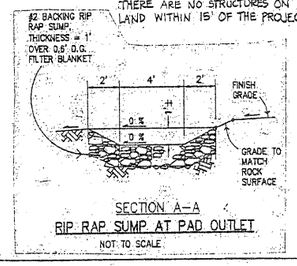
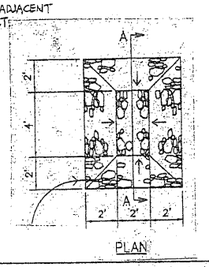
3 FIRE CLEARING EASEMENT GRANTED TO THE COUNTY OF SAN DIEGO PER PARCEL MAP 18704.

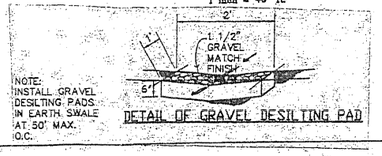
4 I.O.D. IN FAVOR OF SAN DIEGO COUNTY FOR FUEL BREAK RECORDED MAY 3, 1973 AS FILE NO. 73-004818 OF OFFICIAL RECORDS.

NOTE:
THERE ARE NO STRUCTURES ON ADJACENT LAND WITHIN 15' OF THE PROJECT.





NOTE:
INSTALL GRAVEL DESILTING PADS IN EARTH SWALE AT 50' MAX. O.C.



GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

FUEL MANAGEMENT ZONE LEGEND:

FMZ1 — 50' FROM STRUCTURE

FMZ2 — 100' FROM STRUCTURE

COUNTY NOTE:

THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.

CONCEPT GRADING NOTE:

PAD AND DRIVEWAY GRADING IS PRESENTED FOR INFORMATION ONLY TO FACILITATE THE C.E.Q.A. DISCLOSURE PROCESS. THE APPLICANT PROPOSES A LOT SALES PROJECT AND DOES NOT INTEND TO GRADE INDIVIDUAL BUILDING SITES. THE APPLICANT ACKNOWLEDGES THAT TRACT GRADING OF THE SITE MAY REDEFINE THE PROJECT AND MAY NECESSITATE ADDITIONAL PUBLIC REVIEW.

APPROXIMATE PAD/DRIVEWAY GRADING QUANTITIES:

EXCAVATION:	4900 C.Y.
EMBANKMENT:	4900 C.Y.
IMPORT/EXPORT:	0 C.Y.
MAXIMUM SLOPE HEIGHTS:	
CUT:	15' @ 1 1/2:1
FILL:	15' @ 2:1

APPROXIMATE PRIVATE ROAD GRADING QUANTITIES:

EXCAVATION:	2450 C.Y.
EMBANKMENT:	2850 C.Y.
IMPORT/EXPORT:	0 C.Y.
MAXIMUM SLOPE HEIGHTS:	
CUT:	10' @ 1 1/2:1
FILL:	13' @ 2:1

APN:
519-094-18

LEGAL DESCRIPTION:
PARCEL 3 OF PARCEL MAP 7076

SOURCE OF EXISTING TOPOGRAPHY:
COUNTY 200 SCALE TOPOGRAPHIC SURVEY SHEET 206-1815, PHOTOGRAPHY DATED: MAY 1981

PREPARED BY:

CREW ENGINEERING AND SURVEYING
5725 KEARNY VILLA ROAD, STE. "D"
SAN DIEGO, CA. 92123
(858) 571-0555

RONALD C. ASHMAN
RCE 34300 EXPIRES: SEPT. 30, 2009

REVISIONS	BY
1 MOVE CONCEPT GLDG. PCL 2	JC 2/09

FIRE PROTECTION PLAN

MODIFICATION MAP

BABEL DRIVE (JAMUL)

DATE: 11/01/08
SCALE: 1"=40'
DRAWN: S.G.
APPROVED: R.A.
JOB: 1342
SHEET: 1 OF 1

J.N. 1342